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CAR CRAFT

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BEGINNING THIS ISSUE:

**Channeling a
'39 Mercury**

JANUARY 1954

25c



THE FABULOUS DIEHARD page 32

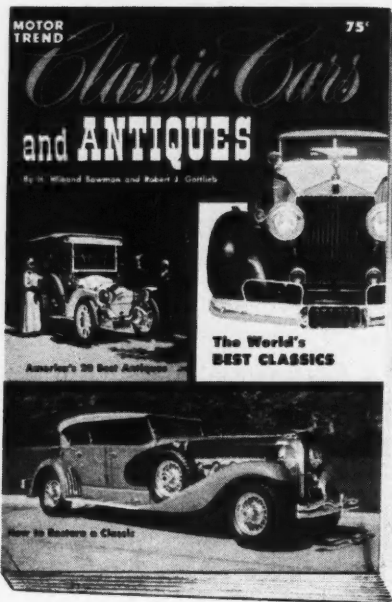
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CAR CRAFT

Vol. I

No. 9

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 The Show-How Magazine

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COVER

Don Pulford who stands behind the hood of his neat Merc custom bought the car for the sole purpose of proving a point to his son. The story starts on page 28. Ektachrome by Zelenka.

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CAR CRAFT

BRIEF AND TO THE POINT:

218 Words from the Editor

Remember a couple of months ago we promised to show you an MG that really gives the boys in the big-bore cars a rough time? Well, take a gander at pages 32 through 37 for the inner workings of Kenny Miles' 90-cubic-incher. While it's true that the record hung up by this little green buggy is partially due to Ken's ability to ramrod the car around a road circuit, it's equally true that no driver, no matter how good, can make a goat stick to the road. To see just how good the car is, take a look at the story of the Terminal Island race that leads off the magazine.

Also, speaking of cars that aren't supposed to get out and go, we present the story of "The Bear," on pages 38 through 41. This is a Buick straight-eight drag machine that has the boys out Santa Ana way scratching heads in wonderment and a graphic example that nothing beats ingenuity.

For those who like to build their own racing equipment we've got a set of plans for a center-mounted steering that shouldn't cost over 15 or 20 bucks to build. For those whose desire is to do their own customizing we have started a new series on channeling.

THINGS TO COME

For a long time, now, we've been wondering just what amount of horsepower can be gained from bolting goodies on top of an engine without once going inside same. This month we got together with Al Sharp, who makes a pretty fair brand of goods, and Frank McGurk, who does ditto and who also owns a chassis dynamometer. Taking a perfectly stock '40 Merc, we started piling the goodies

on top. Then we took dyno readings as each piece was added. For good measure we took the car out to a local drag strip and clocked it through with each change. The complete results were rather startling. We're bringing them to you in the next issue. Also coming up are the stories of the Kurtis 500-S car, the first Buick to run in the Pikes Peak hill climb and the start of a series on the Fordomatic.

there's still time to

say "Merry Christmas" all year long



see page 51!

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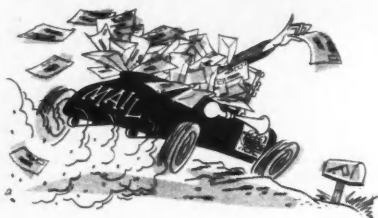
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LETTERS

CORRECTION

Dear Sirs:

I enjoyed your story on the Cunningham sports car in the November issue of your magazine. It was a nice change of pace.

There is one point, however, that I would like to clear up regarding lap records on the French Le Mans road racing circuit. Mr. Christy states in his article that Cunninghams made fastest laps during both the 1952 and 1953 running of the 24-hour long classic.

Actually, the Italian Ferrari holds the honor of having made fastest lap of the last two Le Mans races. Alberto Ascari turned the trick both times; using a 3-litre coupe in '52, and a 4.5-litre coupe in this year's event.

What the Cunninghams did do was clock fastest top speed on the long Le Mans straightaway, which is quite a different thing than setting a lap record. The latter requires a combination of brakes, transmission work, and considerable driver skill.

I wish merely to set the record straight, and mean no offense to Briggs Cunningham, John Fitch, or Phil Walters; all of whom are doing an excellent job of keeping the American flag waving in sports car racing both here and abroad.

I hope that the finish of next year's Le Mans race will find a Cunningham, or maybe a Kurtis, way out in front of the European competition.

Sincerely,
Donald R. Elliott
Buckner, Mo.

If we sound embarrassed, it's because we are, Don. You're entirely right and we hereby make formal apology to Alberto. However, the fact remains that the Cunninghams were operating under a slowdown signal for the greater part of the race. Both Fitch and Walters said later that they could have lapped at consistently faster times had they been given the word to do so.—Ed.

TWO WHEELERS

Dear Sir:

I have been reading your October editorial, the gist of which I take to be: "anything that goes, goes in HONK." Okay, swell, fine, if you go all the way!

I am one of those strange animals that likes rods and cycles! However, road racing, on two or four wheels, appeals to me very little. But I would like to see something about some of the really hot drag and lake-ster machines that most of the other magazines consider strictly tabu.

But back to your editorial, you probably know Lloyd Krant turned better than 127 mph at Paradise Mesa on a 90 inch Harley. Also note the "Beast" and "Brute."

Whether or not you use the cycles you have a fine magazine, keep it up.

Sincerely,

Wm. B. Clark Jr.
Germantown, Tenn.

See page 52.—Ed.

AT LAST

Dear Sirs:

What I want to know is this: why do you guys waste so much of your time and space writing up those horrible California blister boxes people call customs? I personally wouldn't drive one of those things even if it had one-way glass in the windows.

Another thing, that so-called road racing machinery that you've been spreading all over the magazine is for the birds. I've got a Hudson Hornet that will run off and hide from that kind of junk and you can pick the road.

Here's a suggestion for you: why don't you cover what our own manufacturers in Detroit have to offer instead of what a bunch of amateurs in California and a lot of other foreigners think will make a good car. This goes for hot rods, too. I tried a Ford once

and didn't like it. Give me comfort any day.

Very sincerely,

W. R. VanKorben

Conshohocken, Penna.

Everyone to his own taste.—Ed.

CHICAGO DRAGS

Dear Sir:

I have read the last five issues of your magazine, and think it's a great little package of hot rod information. I have been building rods off and on for the last six years, my last one was a '32 Ford Victoria, with a full race engine and chopped four inches.

My home is in Chicago, and I am wondering why you don't have any articles from the mid-west. We have some pretty nice hot rods, that drag at the Half Day strip, and these are fast!

Right now I'm working on some ideas for a dragster, and plan to have one running next year at the drags, and hope to go to Bonneville.

Yours truly,

"Chopper Mech"

Wayne W. Anderson

c/o PM San Francisco, Calif.

DIVIDEND, PAL

Dear Sir:

Far be it from me to quibble about words, but for lack of something better to do I am writing you in regards to an Editorial, "228 Words From the Editor."

There should be a correction made on this to bring it to "236 Words." This shows lack of proof reading that is really scandalous on your part. I am an avid reader of HONK, and I wonder how often you've cheated me out of 8 words of wisdom.

It would be catastrophic if word of this got to your employer.

Sincerely,

Cpl. Ralph Chaney

APO, San Francisco, Calif.

We're both wrong, Ralph. A recheck by all hands has indicated that there are 235, so you didn't get cheated. Instead you got a seven word dividend.—Ed.

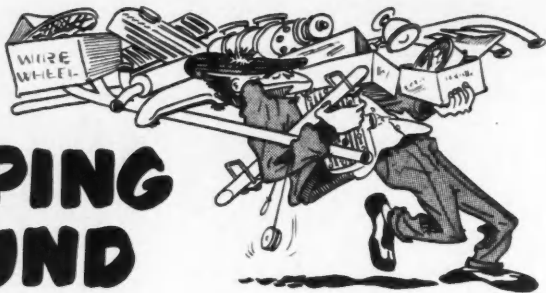
SIXTIES

Dear Sir:

I was wondering what the possibilities

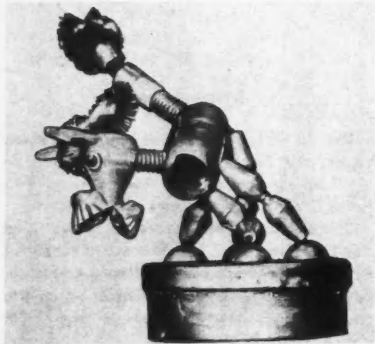
(Continued on page 58)

SHOPPING AROUND



A HORSE ON WHO?

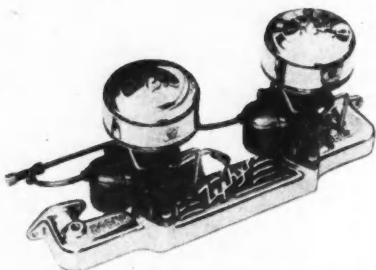
Pictured below is Cyril the Educated Horse. He mounts on the dashboard and hooks into the manifold vacuum line. Then, his makers tell us, when your motor and driving are above reproach Cyril stands steady and erect. When all or any part of



the horse droops or sags you trace the trouble (through a chart provided) to plugs, valve springs, gas mixture, bad driving, etc. Cyril is easy to install and if he does half what's claimed for him should save his cost in gasoline in short order . . . Available by mail from Mehren Industries, Dept. C, 8666 West Pico Blvd., Los Angeles 35, Calif. The price is \$3.95.

ZEPHYR DUAL INTAKE MANIFOLD

A new intake manifold that will boost a 68 H.P. Zephyr 6 up to as high as 77 H.P. at high speeds has been announced by Bell



Auto Parts. Highly polished, the manifold comes complete with throttle linkage and fuel line . . . requires no block changes and is easily installed. Priced at \$43.95 by Bell Auto Parts, 3633 E. Gage Ave., Bell, California.

FEWER FLATS FORECAST

A new latex compound to make your inner tubes puncture proof (at less than \$2.00 per tube) has been marketed by W. J.

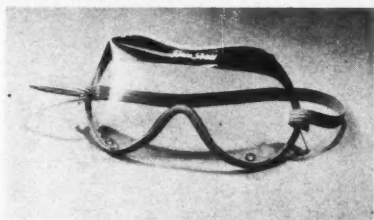


Smith Co. If constant tire changing isn't your idea of a ball . . . you can order four tubes of Safe-T-Gard for \$7.92 postpaid. The address is 420 Lexington Ave., New York 17, New York.

OGLE THE NEW GOGGLES

They call them "Space Shields." The plastic shield gives wide vision and can be

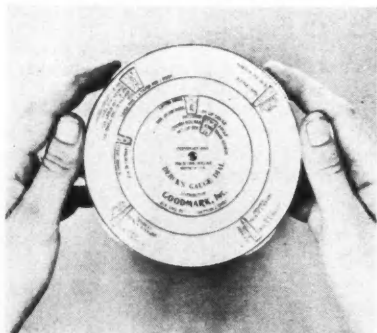
worn over eyeglasses. Metal eyelets permit ventilation. A green sun visor is built in. An adjustable elastic band holds them on.



The price is 96¢. Further information may be had by writing the Poulsen Manufacturing Corp., Fallbrook, Calif.

DOLLAR DECIMAL DIALER

A handful of handy tables will help you figure sizes for numbered or lettered drills; division of circles giving chords and angles; distances across flats and corners of squares or hexagons; taper pin and reamer sizes; double depth of U.S. threads; decimal equivalents; pipe tap sizes, tapers and angles and Woodruff key sizes. 13 tables are encompassed in a 5" diameter pressboard dial that



is 1/8" thick. Price \$1.00, with a moneyback guarantee, from Goodmark Inc., 21 East Second Street, Dayton 1, Ohio.

THE WAX WORKS

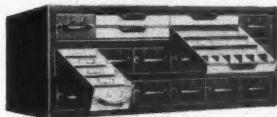
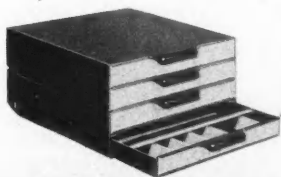
When the little woman declared our golf clubs out of bounds and gave her 10 minute lecture on the evils of a dirty automobile, we thought the whole day was down the chute. Five months of oxidation stood between us and liberty. It was a pleasant



surprise to find that British Formula Wax did a swift, easy cleaning job just as its manufacturers claimed. This wax and cleaner uses a dissolving, rather than abrasive, action and requires a minimum amount of rubbing. Company literature also claims that it is easier on the paint job and lasts longer than most waxes on the market today. Available by mail at \$1.50 per bottle from Custom Products Limited, 729 1/2 No. Western Ave., Los Angeles 29, Calif.

LITTLE GEM

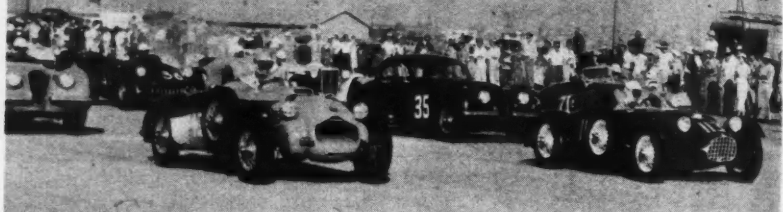
Consisting of two 1 1/2" high drawers in a one-piece welded frame; an overall size of 3 1/4 Hx11 Dx11" W. Each drawer is furnished with 8 dividers, making 24 adjustable compartments. Adding extra dividers can make



56 compartments per unit. Any number of units may be stacked in one rugged assembly. Price—\$8.90 each with extra dividers at 8¢ each. "Little Gems" are designed for insertion in Precision all-steel Standard

(Continued on page 63)

THE ONE-TWO



• Bill Stroppe (left) and Starter Al Torres display big grins at end of main event.

Motorcycles and Sports Cars run for the Navy Relief Benefit

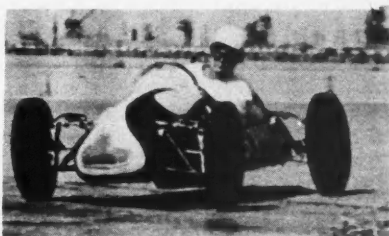
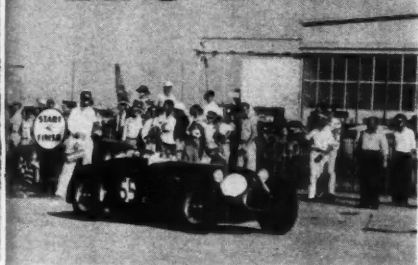
By JOHN CHRISTY and DICK DAY

Photos by D'Olivo, Rickman, Day

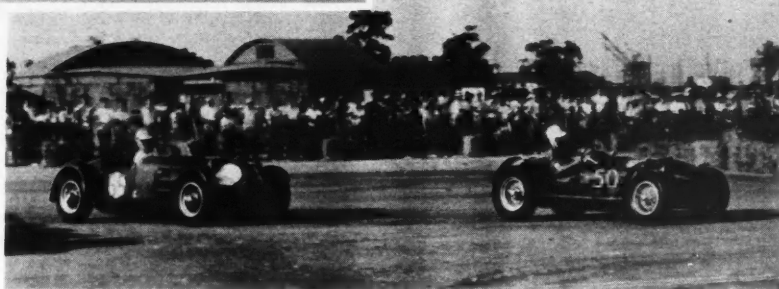


• Ken Miles cuts in sharply with a nicely controlled drift on the fast north turn.

ACT



• The 500 cc Coopers and other Formula III cars breezed past the larger contenders.



• Race within a race was put on by Chuck Daigh (left) and Ken Miles during main event.

Editor's Note: Because of the nature of road racing it was almost impossible to give coverage of both motorcycles and cars in the same story. The sports car main event was a story within a story. The show put on by the bikes merits a story by itself so the staff split the chore. Here, in two parts is the story, or stories, of the show put on by the bikes and the cars for the benefit of Navy Relief on the discontinued Navy airbase at Terminal Island.

THE CARS . . .

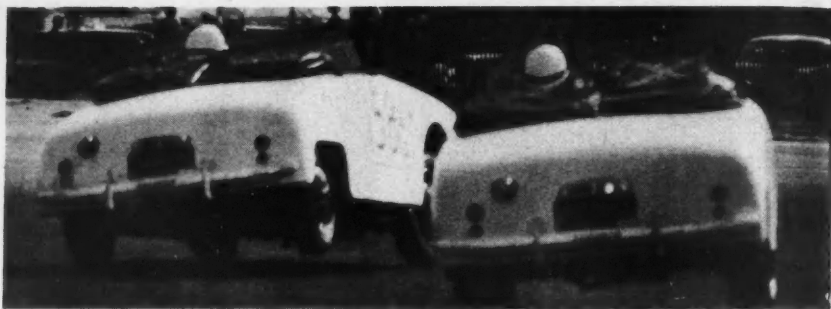
IN A WAY you could call the road race at the Navy's Reeves Field, Terminal Island, California, a repeat performance. It was the fourth time that Bill Stroppe in his Kurtis and Ken Miles (see page 32) pulled a one-two act in the main event.

All of the races prior to the main during

the two day meet were preliminary events leading to the climax of the 69 mile final. During the entire meet there were only three races open to the backyard bombs and other specials. While some of the stock sports jobs went real fast it was common knowledge that the big battle would be when the re-worked machinery met at the end of the first day and in the two races Sunday for strictly non-stock items.

Neither Miles nor Stroppe ran on the first day, preferring to save their machinery for the big blow-off on Sunday. This left the field wide open to another backyard job owned by Jay Beesmyer and driven by Chuck Daigh, a track and lakes roadster builder-driver of long standing. This was a Jaguar powered job once owned by Don Parkinson. Since Parkinson's tenure of ownership the car had obviously undergone some serious in-

(Continued on next page)



• Two Dyna-Panhards drove "under a blanket," taking corners on driven front wheels.

THE ONE-TWO ACT continued

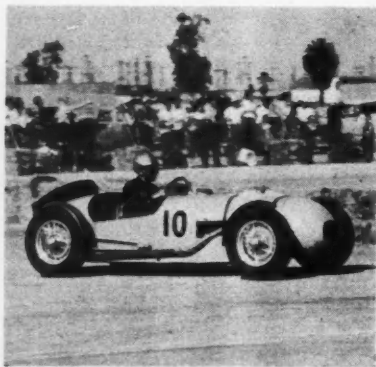
ternal surgery. Chuck mopped the field and won going away.

On Sunday, however, the picture changed. Following two six-lappers for the stock jobs came a 10 lap race of 23 miles for the 91-inch modifieds. Everything in this class from Porsches to a lone Offenhauser special lined up. The Offy, built, owned and driven by George Beavis, figured to be a heavy contender having lapped at a steady two minutes and twelve seconds during practice runs. However, when the flag dropped the Offy was left at the post due to a lockup in the starter Bendix.

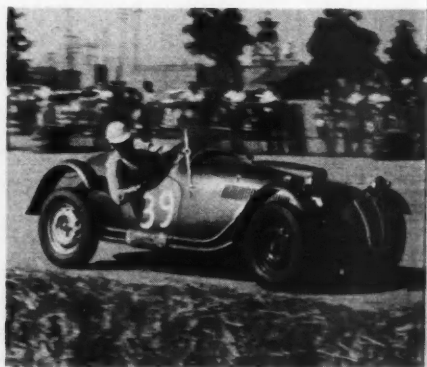
Miles, whose MG was spotted in the middle of the pack, took off like a champion drag artist, pulling everything out of the chute and landing in the lead by the time

the pack rounded the first turn. From then on it was the lanky Englishman's race even though he feathered the throttle for the last five laps. Second spot was taken in a rather strange comeback by Tracy Bird in one of California's first modified TD's which was built up more than three years ago by John VonNeumann. This car had cleaned house when it was first built but had dropped out of sight for a considerable space of time in the competition scene.

The next automobile event was the main. Among the entries were three Allards, two of which were powered by Cadillacs and one of which had a big, hairy-chested Lincoln stuffed under the hood. Also spattered through the lineup were three Kurtises, a DeSoto powered job, Frank McGurk's Cadillac engined car, both untried, and Bill Stroppe's Merc-Kurtis. Way in the back was



• George Beavis's Offenhauser Special was considered to be a threat but didn't start.



• Jim Lowe's Frazer-Nash was quite potent but lacked the suds of the rapid specials.

Ken Miles and up on the bubble was Chuck Daigh.

When the flag came down Stroppe sliced through the pack as easily as if they were parked. Right behind him through the hole, past Allards, Jags and all, came Miles. As they hit the back straight the first three positions were held down by Stroppe, Daigh and Miles in that order. Stroppe pulled way fast and within three laps had a mile's worth of space between his turtle-deck and the lonesome hassle being staged by Daigh and Miles for second spot. Never during the race was Bill even threatened.

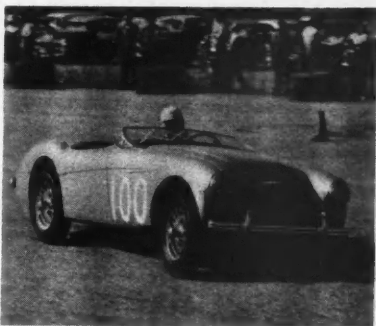
After several laps Daigh was forced to make a pit stop for what sounded like a stuck exhaust valve. Since nothing could be done he was waved on. It took him several laps to catch up to Miles who refused to be headed.

Chuck's Jag kept getting sicker and sicker and after a desperate battle to catch Miles he fell back and was passed by the Lincoln Allard driven by Max Briney. This gave him fourth spot over-all.

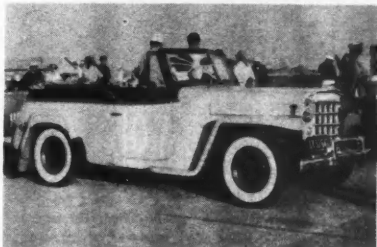
This led to the second battle within a battle. During the earlier hassle Stroppe had been lapping car after car as had Miles. Stroppe, however, was lapping faster. As the race came into the final laps the big question was: Can Stroppe lap the field?

He almost made it. Stroppe was chopping three and four seconds a lap off Miles' time and as the last lap started was only four seconds from coming around the screaming four barreler. Miles apparently had other plans, however, and as they came down the home stretch it was nip and tuck. As the checker came down Miles was almost, but not quite, a lap behind Stroppe. Had the finish line been moved up 100 feet he would have been lapped by the chunky red Kurtis, although he in turn had lapped most of the rest of the field.

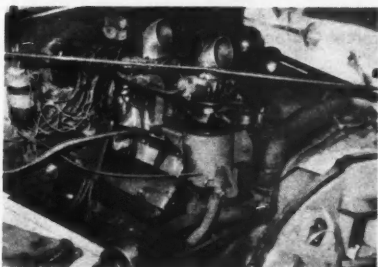
Who said the flat-heads were through?



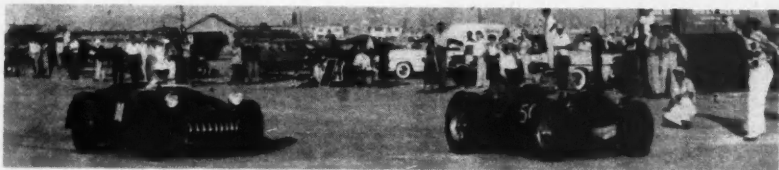
• Healey Hundred stuck with the Jaguars but overheated and had to drop back.



• Stude-powered Willys Jeepster ran very well but threw a front wheel in the race.



• Punchy Studebaker V-8 gave the Willys Jeepster lots of acceleration and top speed.



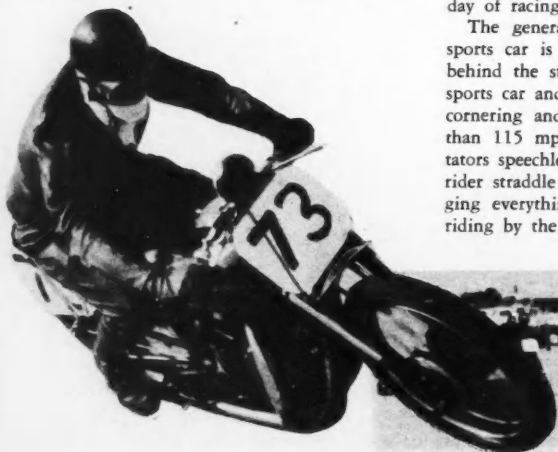
• At the finish of the main event Stroppe (left) barely failed to lap Ken Miles' MG.

THE ONE-TWO ACT continued



• Saturday's 25 miler got underway above. Russ Good No. 102 was winner of Sunday's race, but sheared mag shaft on Saturday.

• No. 73 Fred Smith led Sunday's race 'til spill in last lap retired him. Note the different riding styles of Smith and Good.



... AND THE CYCLES

ONCE saw a motorcycle magazine title, "Road Racing, Will America Buy It?" Well, nobody can speak for the entire country, but for Southern California . . . it's here to stay!

Pure evidence of this was a two-race program combined with two days of sports car racing held at Terminal Island's abandoned Navy airstrip.

This was by no means the first opportunity the racing public has had to see these two-wheeled daredevils, for ever since the birth of sports car racing in Southern California the motorcycles have been included in the program for one or more events.

These past combined sports car and bike road races have met with a huge amount of success, so successful that the newly organized field of pavement bike jockeys have promoted themselves a separate road race in Griffith Park, Los Angeles' largest recreation area, an event that is expected to draw some twenty thousand speed enthusiasts for a full day of racing.

The general contention of the bike vs. sports car is that when you drop a driver behind the steering wheel of a rapid little sports car and turn him loose for some fast cornering and straightaway speeds of more than 115 mph, it leaves the viewing spectators speechless. But watching a leather-clad rider straddle a screaming motorcycle, dragging everything except the handlebars and riding by the seat of his britches down this



same straightaway, takes these same speechless spectators and practically snaps them out of their shoes.

Terminal Island races were no different, for as soon as some twenty-six riders pushed their mounts to the starting line you could see the spectators list about five degrees forward and hear camera shutters cock. When Wes Drennen, starter, dropped the flag for this Saturday's twenty-five miler, all twenty-six riders lurched forward in a mass drag for the first corner.

Things reached a peak early, for here six riders combined themselves with the hay bales. Kelly Meyers, on a screaming Triumph, emerged at the head of the pack followed closely by Russ Good, also Triumph mounted. The third lap ended Meyers' flash lead when he slid down on a fast corner, setting Russ Good in the lead.

Good's very secure lead was forfeited in the closing laps, due to a sheared magneto shaft. Third spot rider Marty Dickerson, on a Vincent "Comet" automatically took the lead over the barreling herd.

As the race came to an end, Marty was unchallenged and first across the finish line followed by Bud Parriott (Triumph) and Red Ludford on a 7R AJS "Boy Racer." The twenty-one cubic inch class was won by Russ Sierck riding a BSA.

Sunday's race for forty cubic inch and unlimited class machines got off to a thrilling beginning when Walt Harper rode his potent 40-cu. in. BSA on its rear wheel for ap-



• Walt Harper gave crowds a thrill at start of Sunday's race by riding on rear wheel.

proximately fifty feet as the group was flagged off. Kelly Meyers again grabbed an early lead on a 40-in. Triumph, but was quickly overtaken by Russ Good riding one of the new Harley-Davidson KH models possessing 55-cu. ins. These two men were actually running in separate classes, Russ being in the unlimited group because of displacement.

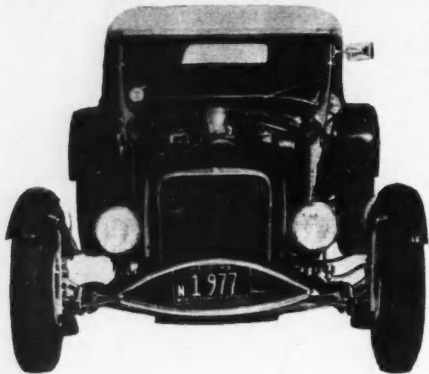
By the second lap Meyers had retired from the race, due to mechanical trouble,

(Continued on page 59)

• Swede Belin rode his Triumph T-bird to a victory in Sunday's 40 cubic inch class.



A Warmed-Over Spud



**Idaho roadster
makes debut
at Bonneville**

By DICK DAY

Photos by Eric Rickman

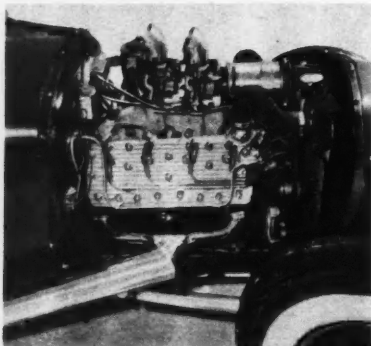
WHENEVER speed enthusiasts can be diverted from watching this country's fastest straight-a-way equipment storm down Bonneville's famous speed course, then the diversionary item has to be one of an outstanding nature . . . and it was!

As soon as Neil DeAtley pulled his beautiful little red '27 T roadster to a halt in the non-participants' parking area, the small car was immediately swallowed-up by a huge throng of curious spectators and

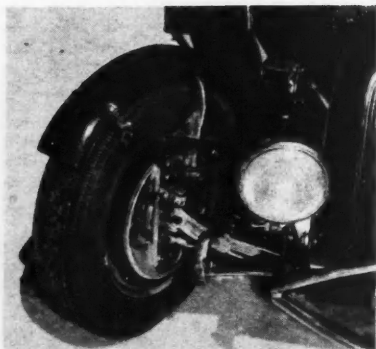
photographers checking on the newcomer.

Neil and his father drove the pint-size roadster all the way from their home town of Lewiston, Idaho to see the Bonneville Nationals for the first time. When Neil's father emerged from the tiny custom upholstered cockpit his summary of the half finished trip was, "I haven't had this much fun in years."

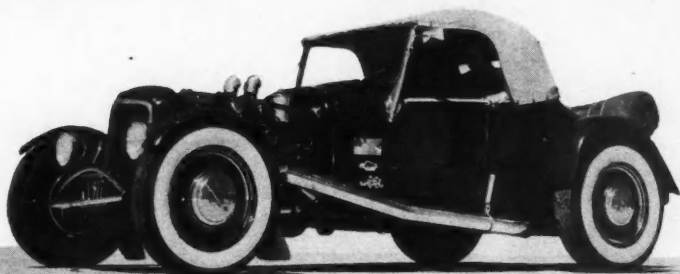
Originally the car was purchased in Vancouver, Washington, and upon reaching home,



■ Powerplant fits snugly in T's chassis. Installation of large core radiator is clearly seen. Entire exhaust system is home-made.



■ Triumph motorcycle fenders are rigidly attached to brake's backing plate. Roadster's entire front suspension is chromed.



• Rear section of T's frame Z-ed and body channeled 3 inches, lends low-slung look.

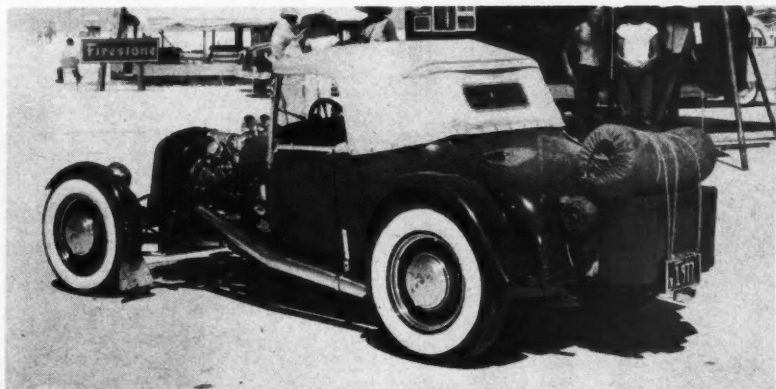
the car was completely disassembled and rebuilt to its present appearance by father and son. The T's frame was strengthened and the body was channeled three inches. Discarded trailer fenders were adapted to the body for rear fenders, while up front, light motorcycle fenders were decided upon. A special four inch core radiator with a capacity of thirty-two quarts is housed in a '33 Chev radiator shell, and the grille bars from a '35 Chevy were installed in the shell itself. Accessory seal beam units were purchased for headlights and in the rear '39 Ford tear-drop taillights were used.

The powerplant consists of a '50 Ford block possessing 239 cubic inches, carrying

Offenhauser 8.5 to 1 heads and dual carburetor manifold; ignition is Mallory. The exhaust system, including large chromed headers that trail along the outside of the body, was completely home-built.

The T body sports a fire engine red paint job, set off by various chromed components on the engine and the front suspension. Inside the little jewel is yellow and black rolled and pleated upholstery.

The car while at Bonneville was enjoyed by many onlooking spectators as much as Bonneville was enjoyed by Neil and his father, and with all respects, the title, "A Warmed-over Spud" should possibly be changed to: "An Idaho Hot Potato!"



• A home-built rack was installed to rear frame members for carrying trip's luggage.



DRAGGIN GETS TO BE A CUSTOM

Oldsmobile with Cad engine proves winning combo

by Dick Day
Photos by Felix Zelenka

WHAT determines a hot rodder? Is there an age limit on this nation-wide speed medium?" If John Q. Public was to answer this question, his opinions would be many. If I had to answer the question two months ago, it would have pin-pointed the young guy in levis and T-shirt at the local drags or lake meet; having himself a ball running some fast piece of equipment that had taken half the night and day before to assemble before being able to run. This was my opinion two months ago, before I had met a doctor with a rapid little roadster; a top, national sports cartoonist with a backyard sports car, and an optometrist with a screaming '34 Ford, and George Cerny.

My first encounter with George Cerny, a 37-year-old soft-spoken man and father of four boys, was at a small auto show staged by a car association (of which he is a member), to raise treasury funds for a future drag strip that the association is hoping to obtain. At this time we confronted him with the idea of doing a story on his beautiful '51 Olds 88 Holiday that was on display. He consented and the more we talked of the car the more interesting the story became.

We found that George and his brother own and operate a body and paint shop in

Compton, California and that all the customizing on the Olds was done there. The exterior of the car was treated in a conservative manner. The only alterations that the front section received were the removal of the hood ornament and insignia. The headlight trim and grille were left completely stock. The front suspension's coil springs were relieved of a ring and a half for lowering. This dropped the car approximately four inches. George's desire was that the height of the top of the fender openings be level with the top of the white wall section of the front tires, for which four inches was just a shade too low. Cerny then added to each shortened coil spring, a small one-inch rubber shim that is designed to fit between two of the coils of the spring. These small rubber shims were originally designed for sagging or worn coil springs, but in this case brought the car up an inch to the desired level and for roadability and handling, have proven flawless.

A clever bit of trim removal was executed on the sides of the car, this being only the corrugated ribbon that was the Olds trade mark for that particular year. This left the gravel guard and both of the rub strips for
(Continued on page 20)



● When customizing the Olds, Cerny kept his innovations on a conservative basis, blending with the stock components that were untouched. George uses the car for everyday purposes as well as racing.

● By adapting the tail section of '53 98 rear fenders and removing the rear fender's chrome ribbon on each side, Cerny has accomplished two factors: more length and almost exact replica of '53 98 Olds.



DRAGGIN' CUSTOM continued

protection, and with ribbon removed, both pieces seemed to accentuate the length and lowness of the car.

The rear section of the Olds received the greatest amount of body work. '53 Olds 98 rear fenders were spliced to the stock 88 fenders. This added approximately two inches at the rear. It also allowed the use of '53 taillights and trim. The trunk was completely smoothed off except for the small key lock. Exhaust tips were brought out through the rear bumper, and the rear bumper pan was completely molded into the body and lower rear fender panels. The car is lacquered with a two-tone maroon on the body and yellow copper on the top.

The interior of the car is, without doubt, one of the greatest jobs that Gaylord's custom upholstery shop has ever turned out. The workmanship is flawless and the clean contrasting color scheme beautiful. The seats and side panels are a combination of large rolls and small pleats. The small pleats are covered in a saddle tan colored material and the rolls are an egg white. All piping used in the seats and headliner is saddle tan. The floor rugs are done in a dark matching color and trimmed in white. The dash is painted in a two-tone manner, the upper part being copper orange and the lower part egg white, matching with the upholstery theme. All interior trim such as window frames, etc., is chromed.

• Olds can bring home the spoils in a car show just as easily as it can at the drags. Here is George with his sweepstake awards for car show.



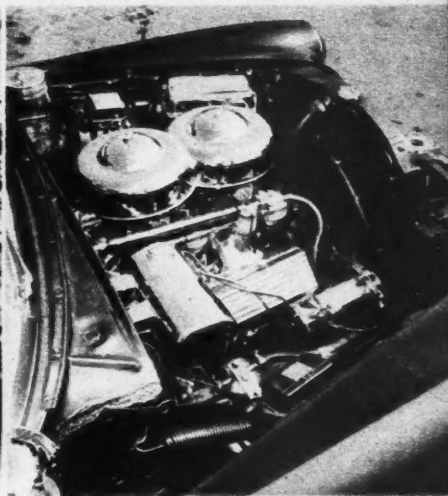
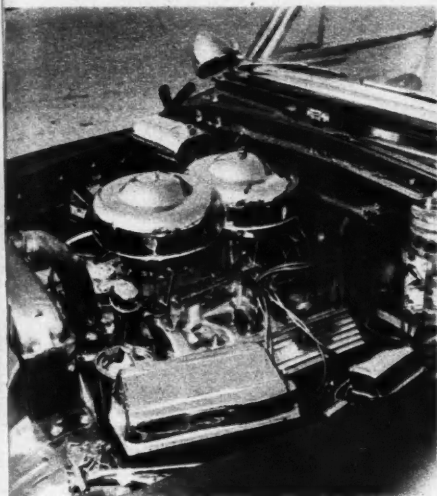
After marvelling at the beautiful interior and the clever and conservative way that he had customized the body, George opened the hood and we got our first glimpse at the powerplant. There poised a big full race Caddie engine with a blinding array of chrome that warranted the use of dark glasses.

At this point the conversation switched from customizing to speed. It seems that George's second home is Santa Ana's quarter-mile drag strip, where he and several of his friends have been having it out for several months for the title of top dog in the post war heavy coupe and sedan class. George has brought home several trophies for winning final elimination heats, but hasn't yet obtained his personal goal of hitting the flat hundred mark, the record held by his buddy, Glen Overmeyer, with a Cad-powered '53 Studebaker. Cerny stated that the following weekend was going to be the do-or-die attempt, for he had just completely gone through the engine, adding a few more goodies and replacing the stock hydramatic transmission with a 1937 floor shift LaSalle box in hopes of eliminating the precious seconds lost with hydramatic. This he thought would give the extra punch that was needed to break the century mark.

He needed no extra punch for the show, though, for by the time the judges had given his Olds the once over, George walked away from the announcer's stand with the first place trophy in his hard top coupe division, and then was recalled to be awarded the show's large sweepstake trophy for the top

• Dotted line indicates where '53 98 fenders were spliced onto '51 88 Olds fenders. Chrome ribbon was also removed from the rear fender.





• The gag saying, "If it won't go, chrome it" falls all to pieces when speaking of Cerny's Cad power-plant. Everything that comes off has seen inside of chrome shop. P.S.—Engine is capable of 135 mph.

car of the event. We congratulated the winner and stamped the story "to be continued at the Santa Ana drags."

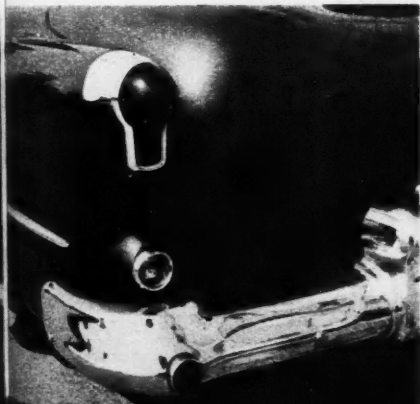
Cerny rolled into the pit area early Sunday morning with his four sons, who act as a family cheering section and assist in the shade-tree tune-ups. On his first few runs the Olds acted a bit sluggish and his times were not much better than his previous of 93:00

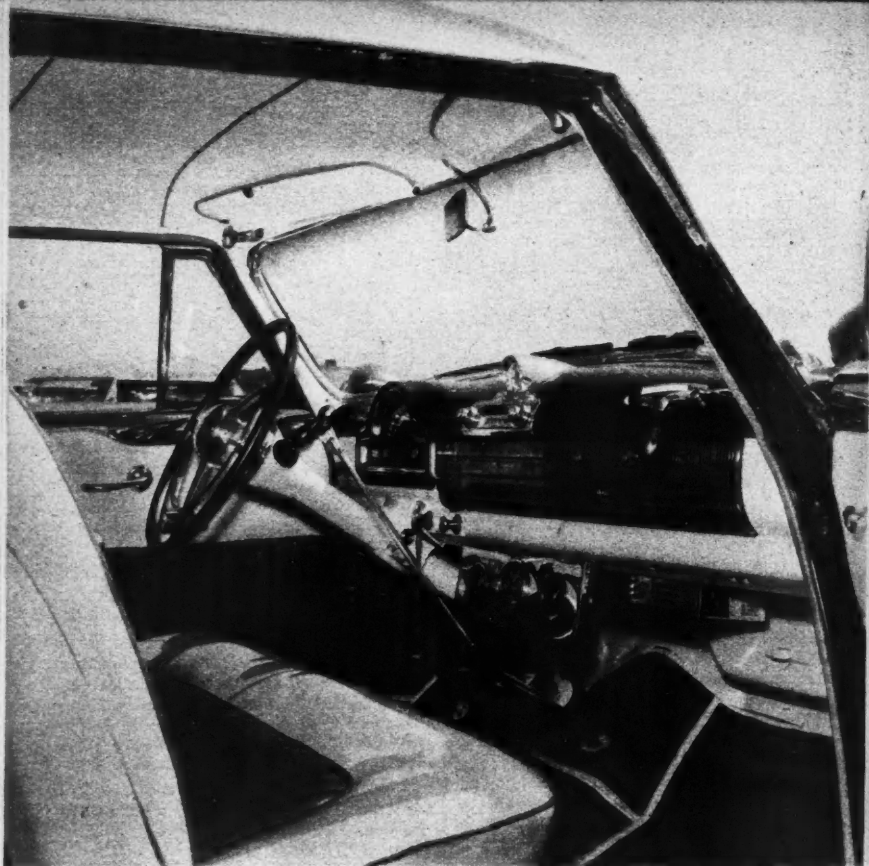
mph. While George was trying to find out his difficulties, Glen Overmeyer with his Stude-Cadillac was dueling away with Tommy Baker and his screaming Cad out on the tarmac. When Cerny finally solved his minor ignition troubles he returned to the starting line late in the afternoon. The officials offered us, and the spectators, a sight that is

(Continued on Next Page)

• Both exhaust pipe tips were brought out through the stock bumper. Cerny runs Advance headers with two-inch diameter exhaust pipes.

• When running at Bonneville Speed Trials the interior was gutted for less weight. Back seat and part of the front was completely removed.





- Olds hydramatic transmission has been removed, replaced with a '37 La Salle floor shift for drags.

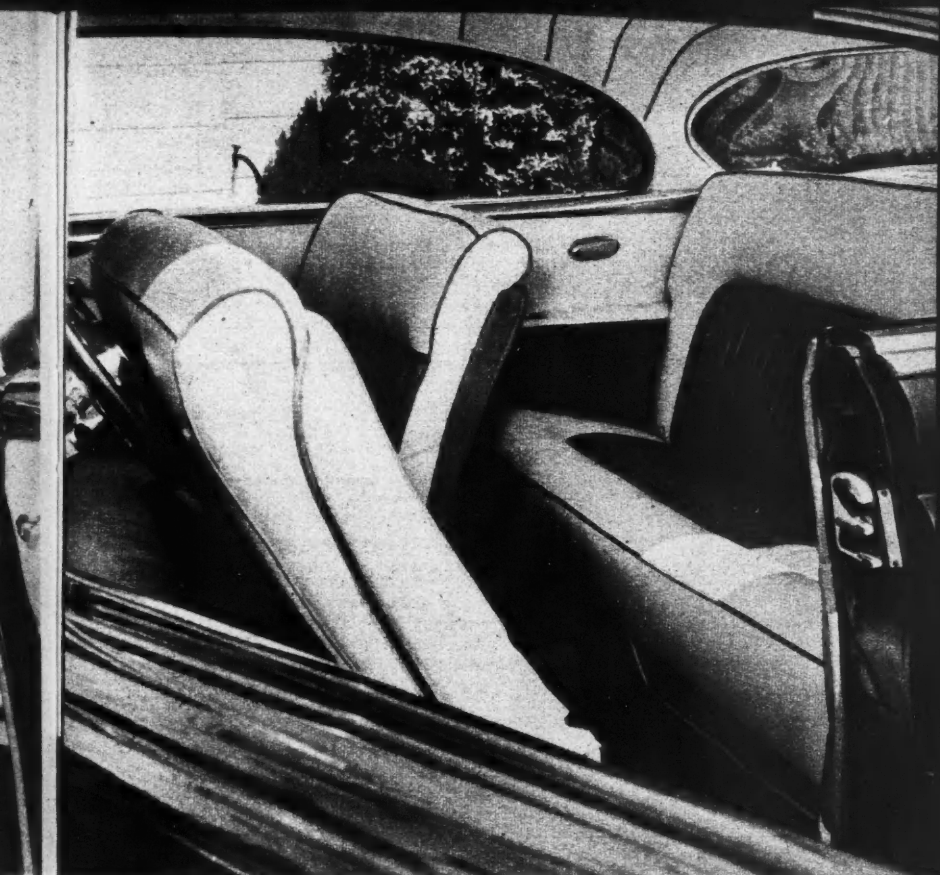
DRAGGIN' CUSTOM *continued*

not often seen at any drag race, that being a three-way run-off between Cerny, Baker and Overmeyer. At the start all three cars got underway together; as the finish line drew

nearer, Cerny was easing to the front. As they crossed the finish line George was approximately a car length and a half ahead of Overmeyer, and Baker was to the rear of this. The time was a flat 98:00 mph, and the trophy is now sitting on George's shop mantel.

- Three of the fastest stock bodied cars in the country (left to right) Glen Overmeyer's Cad-Studie, George Cerny's Cad-Olds and Tommy Baker's Cad. Cerny won over Overmeyer and Baker in heat race.





• Interior is done in saddle tan and eggshell color combination. Floor rug is contrasting dark brown.

Well, like I said, we were going to cap the story and send it to press, but these three got into a big bench racing session and decided to carry the duel to the Bonneville Salt Flats for the National Speed Trials meet that was scheduled for a few weeks away. I sharpened my pencil...

The first few days at Bonneville saw Overmeyer holding down the top position in the coupe's and sedan's "D" class with a time of 134 mph, Cerny second at 133 mph and Baker blew up his engine turning a 127 mph. By the end of the week Overmeyer and Cerny were ready to make their last attempts at bettering their previous times. George was the first to run and turned a flat-out time of

135 mph, adding two miles more than his previous time and taking over first spot. When Overmeyer headed down the course, the tension was at its peak — everyone knew the little Studebaker was going to have to really fly to better Cerny's latest time. When the word reached the starting line the story was history, time... 138 mph.

The next day we saw the Hylton Bros. from Santa Barbara, California, unleash their fenderless coupe down the course and turn a 147 mph to take top honors in the "D" class. This to Overmeyer and Cerny was a spark out of nowhere and sent each back down the winners' list one place.

(Continued on Page 60)

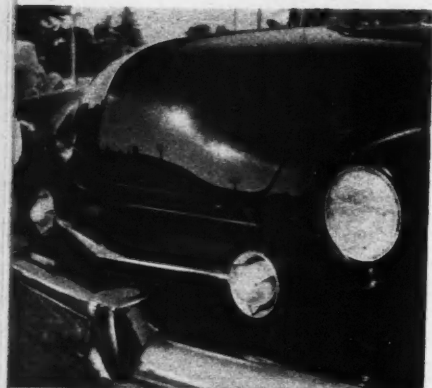


TORCH TIPS

Building a Floating Grille

By Dick Day

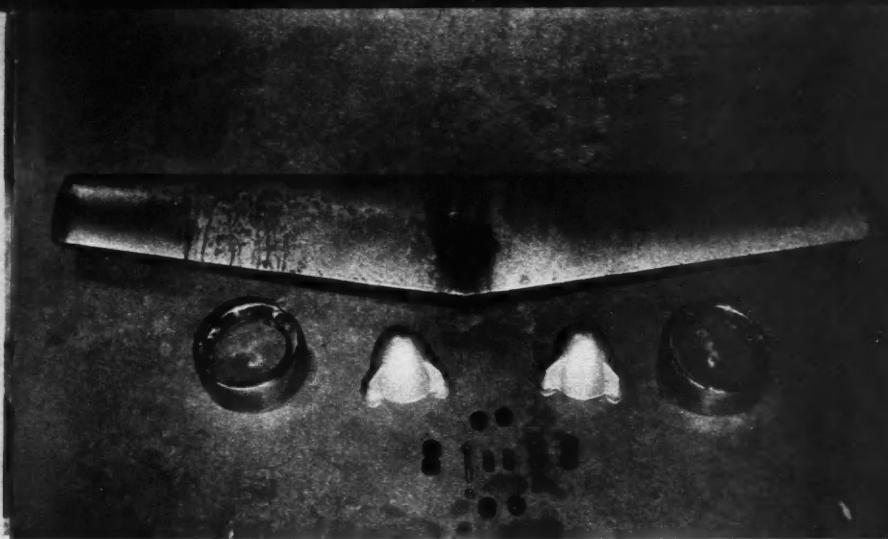
Photos by George Barris



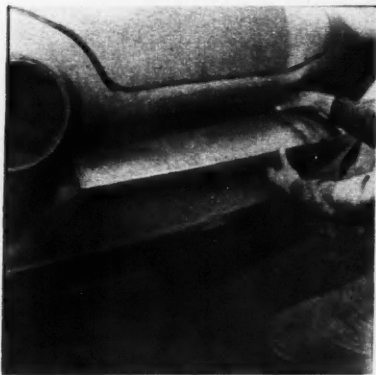
THE grille of an automobile is the one component that can make it or break it for style. Lately, cars emerging from Detroit's assembly lines have been sporting heavier and more massive chromed grilles with each year's production. In many cases these huge "dollar-grin" grilles have a tendency to appear overloaded and nose heavy compared to the rest of the car. Custom shops throughout the country are discarding these grilles and are replacing them with simple, one and two piece designs that blend better with the front and overall size of the car.

There are several techniques used in restyling new grilles; some are simple built-in designs running across the opening, others are made to fit the opening and then installed, supported only from the bumper pan on rubber bushings. These are called "Floating Grilles" and present a very clean and unique style to the front of the car. They usually consist of a main bar with various components attached to each end. The main bar can be made up of many stock grille bars or it can be fabricated of sheet metal as is the one in this story. The ends can be left plain or sections of bumper guards and stock grille components can be attached. There is no set rule or way of designing it, but simplicity is the goal. This step by step story is from a grille conversion that was performed on John Wright's '50 Mercury at the Barris Brothers' Shop in Lynwood, California.





1. Material used to construct Wright's Merc floating grille was: one main bar made from 20 gauge cold roll sheet metal, two '50 Studebaker nose grille rings (chrome outside retainer and inner plastic spinner), three heavy springs, six rubber washers and three cap screws. Main bar was made from sheet metal and from leading edge, flares back similar to a wedge shape, as can be seen in the other photographs.



2. First step will consist of removing all stock grille components and fitting new main bar to opening for size and length. Size of bolts and springs will be determined by the height of the bar that will ride on the bumper pan.

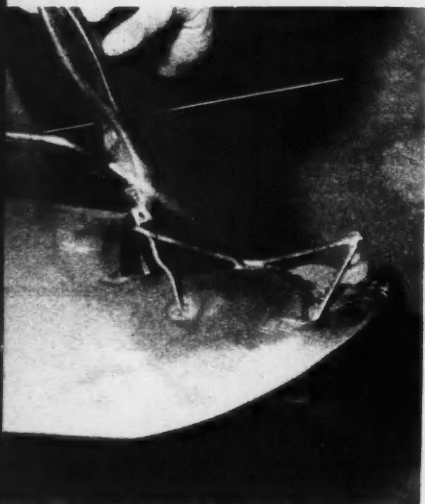


3. After selecting components for ends of main bar, which in Wright's case were the Stude nose rings, ends must be fitted and attached. The leading ends of the main bar must now be cut so as to allow ring to fit into bar. Back edge of main bar can now be tapered in toward the front to fit flush with the ring. When this is completed, weld a small plate to the underneath side of the main bar. This will enable you to bolt chrome ring to the main bar.
(Continued on Next Page)



TORCH TIPS continued

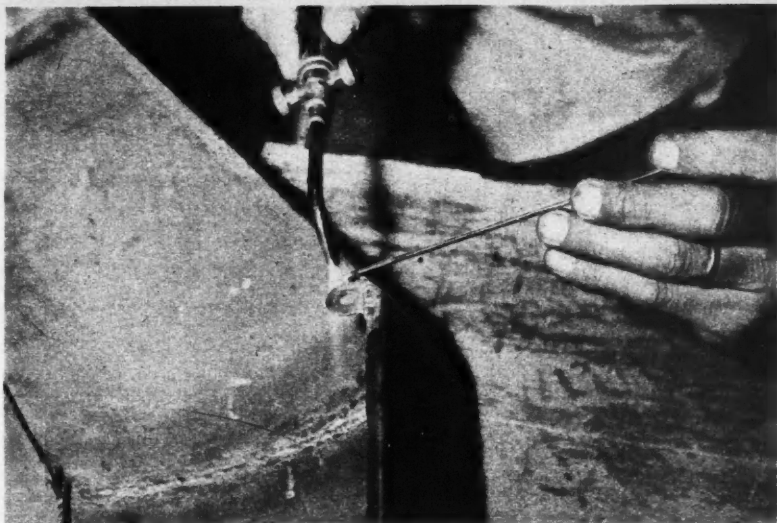
4. Clearly shown is the small mounted partition to which chrome ring bolts. Back tapered edge is being finished off with brazed bead. When bead is completed edge will be ground down and smoothed off. Small three-pronged mounting made from 1/8-inch welding rod has been built to attach the inner plastic spinner rings too.



5. To each prong of the small triangular web braze a small nut. This is the method used to bolt the inner plastic spinner onto the web.



6. This is the assembly procedure: first bolt on plastic spinner to webbing; chrome retainer ring is then slipped over spinner and is bolted to partition on underneath side of the main bar.



7. At forward edge and in the center of the bar weld a flat washer for a bolt mounting.

BELOW

8. The bolt assembly on each retainer ring is as follows: Bolt is set in retainer ring. Rubber spacer is then set on and followed by a metal flange. A second rubber bushing comes next and is followed by a short spring. A third rubber spacer completes the assembly. Length of spring controls the height of rings above pan. Center mounting is spaced by spring and two rubber bushings. Lock nuts hold bolts to pan. With the grille completely assembled fit it to opening and mark bumper pan for bolt holes. Grille should now be disassembled and where round end pieces fit and recess into the main bar, edges here should be hand filed and finished off with a snug fit between both the components. When this is completed the entire grille unit is now ready to be rechromed.



9. Last step will be to drill holes in the bumper pan for mounting the floating grille.



COVER CAR

LIKE SON,



• Hood and the top of the front fenders have been slightly peaked to blend with one another. Grille consists of a main bar made of scrap material and three '50 Cadillac front bumper-guard dagmars.

LIKE FATHER

By Dick Day

Photos by Felix Zelenka

THIS month's cover car presents a pleasant and interesting switch. It seems that for some time Don Pulford and his seventeen-year-old son, both avid car fans, have been hasseling over what determines good restyling and what doesn't. This controversy between the two ended with the senior stepping to the nearest Mercury dealer and purchasing a new two-door sedan for the sole purpose of customizing the thing. "This," says Don, "was my only way out."

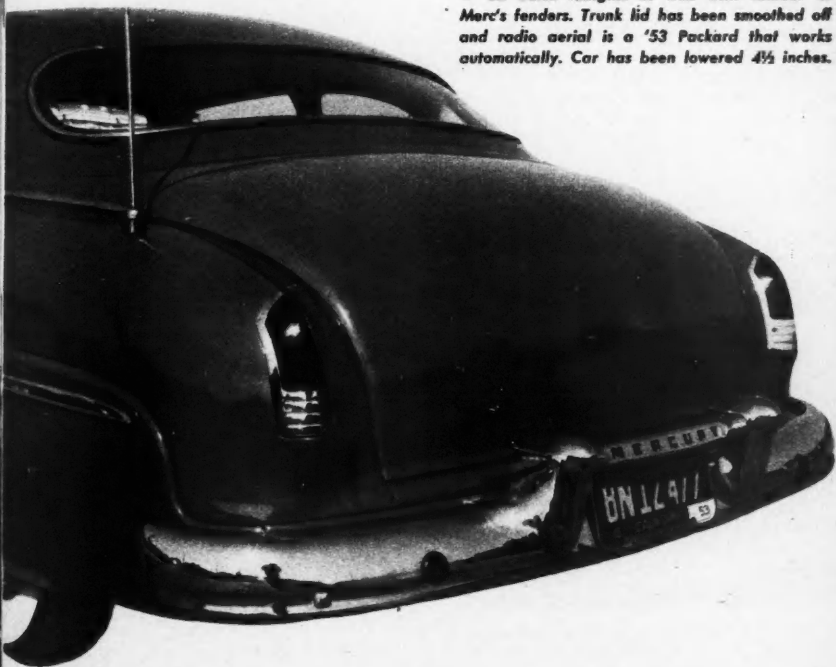
Don selected Bill Babb's Custom Shop in Glendale, California, to restyle the new Merc. Bill and his two co-workers, Lynn DeCamp and Dan Knight, went into a huddle as to

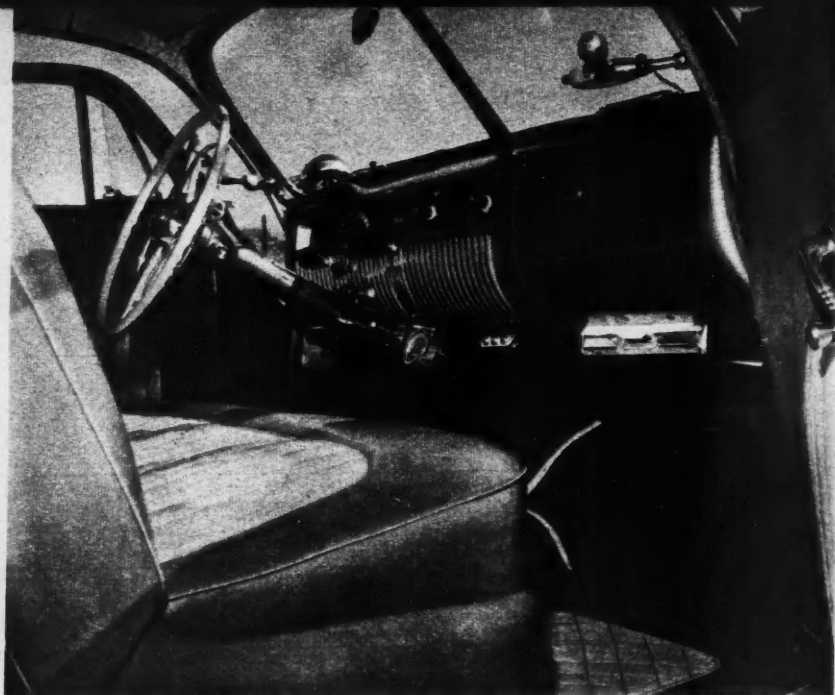
just what innovations were to take place. Don was confronted with the group's intentions and agreed. His method of controlling the process of work and price was very clever.

He manages the Chuck Wagon restaurant in Burbank, California, and in this position receives bonus checks from time to time. These he confesses were the monetary source for all the custom work done, and every time one came through another part of the car was completed. At the end of two years the car was in a finished status and the personal pocketbook untouched.

The first steps in restyling were along the
(Continued on Next Page)

• '52 Buick taillights fit well with contour of Merc's fenders. Trunk lid has been smoothed off and radio aerial is a '53 Packard that works automatically. Car has been lowered 4½ inches.





• Floor rug is a contrasting dark brown with speckled white trim which carries on the interior motif.

LIKE SON, LIKE FATHER *continued*

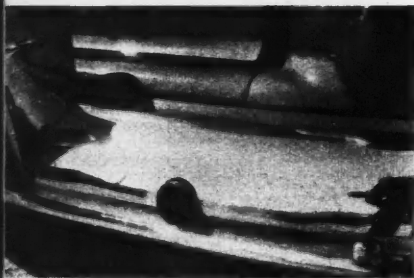
general trends; the hood was nosed and headlights were frenched with a slight tunnelled effect. The tops of the front fenders were slightly peaked, harmonizing beautifully with the hood. The stock grille was discarded and replaced with a very clever one bar arrangement. All body and fender paneling around

the grille opening was molded back to a chromed decorative wire screen that serves as a backdrop to the grille.

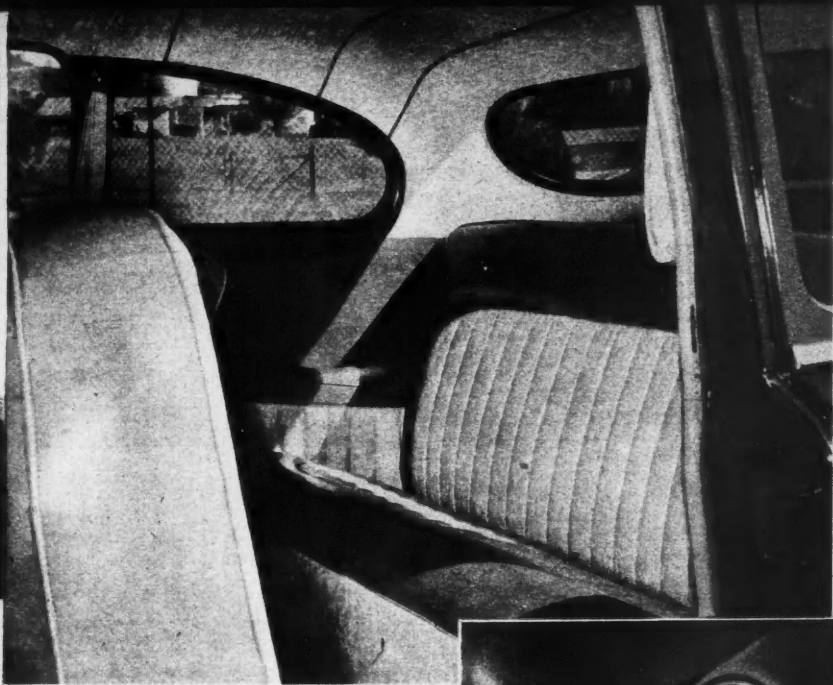
The main grille bar was made from scrap components laying around the shop. Three small '50 Cad dagmars were adapted to the new grille bar, and then each end of the bar was contoured to fit the lower fender panels. The stock front bumper has had adapted to its center an oblong license bracket made of cold rolled tubing and a flat sheet metal plate. This was welded and molded to the bumper and then the whole works was rechromed.

The rear trunk was decked and the stock taillights were replaced with '52 Buick taillights. Exhaust tips were brought out through each end of the bumper. A component that is very rarely substituted, but is sometimes repositioned is the aerial. Don installed a '53 Packard electrically operated aerial. This was more of a challenge to see if the complete unit could be installed in the Merc's rear fender than a necessary item.

The interior is a completely customized job from floor rugs to headliner, and was



• The rear bumper was left practically stock except for the neat, protruding exhaust tip.



● The interior, re-upholstered by L and L, is in a saddle tan and eggshell leatherette.

done by L. and L. auto upholstery of Glendale, California. Seats and side panels are done in saddle tan and speckled white rolls and pleats. Just below the dash is a small chromed plate containing all the solenoid push buttons that operate the doors, hood and trunk. The exterior of the car is painted a marine turquoise blue.

The engine at the present has a $\frac{3}{4}$ Harman and Collins cam, Navarro heads, Edelbrock four throat manifold, '52 Buick carburetor and Mallory ignition. Don plans on having the engine completely rebuilt in a full race manner by So. Cal. Speed Shop when the next bonus check arrives.

When talking to Don and writing the story it occurred to us that somebody in this family was pretty cagey, for now that the car is completed and an eye stopper wherever it's driven, did Don really show his son what determines a good looking custom or... did the son con the old man into building a beautiful car for his Saturday night dates?

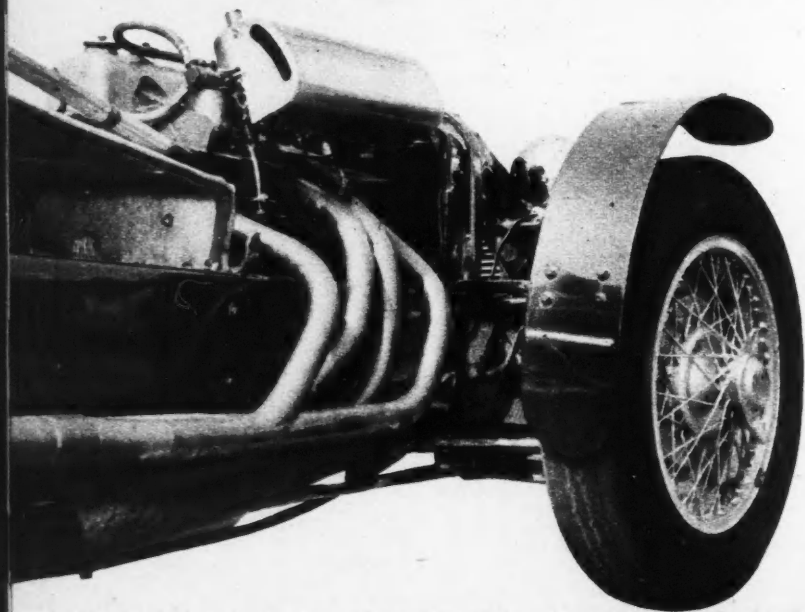


● Headlights have been frenched with a tunneled appearance. Note how beautifully the grille's main bar has been cut to conform with the contour of the lower front fender panel.

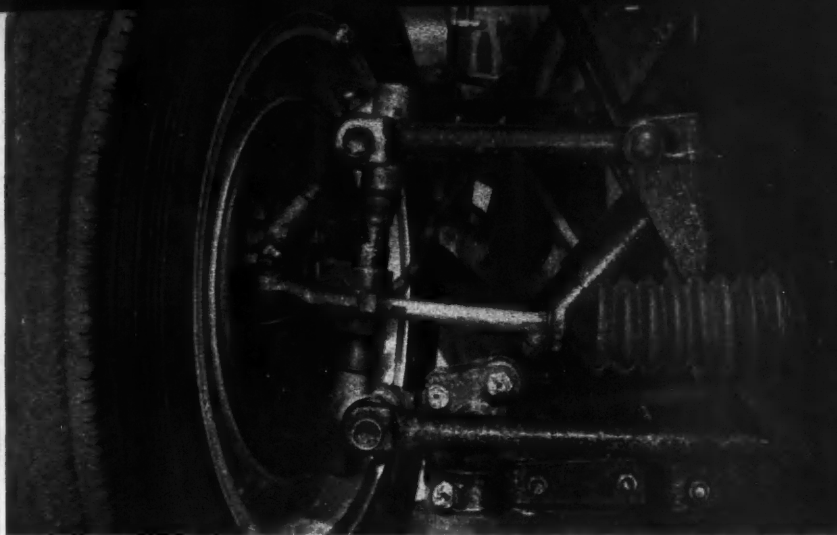


THE FABULOUS DIEHARD

• Ken Miles, ever present cigarette in mouth, fires up the car to check smoothness of mill.



• Each pipe of exhaust headers is a specific length. Ken claims exhaust tuning is vital in small mill.



• Front suspension is MG, Morris Minor parts and homemade wishbone arms on fabricated tower.

They may come bigger but they don't come better

Photos by Felix Zelenka
Illustration by George Wallace

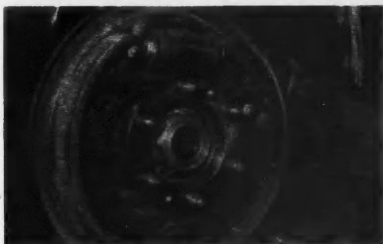
ONCE upon a time, when the MG first started coming across the pond in super-volume lots, automotive writers of the period fell all over themselves praising the little cars. They were lauded to the skies as being the next best thing to owning a Grand Prix race car.

There was nothing they couldn't prune. The only trouble was that most of the praise came from folks who had never driven anything that handled better than the family hack. Handle the MG did and does. As it came over the counter, go it did not. As hotter versions of the genus sports car were stuck together or imported, the MG became something for going to and coming from road races.

Now, MG has enjoyed a record of racing wins dating back for more than 20 years. Consequently when the little bears began to be blown off in wholesale lots by everything but soap box derby cars, upper lips began to get very stiff in Abingdon and in all Lord Nuffield's many branches around the world.

(Continued on Page 34)

JANUARY 1954

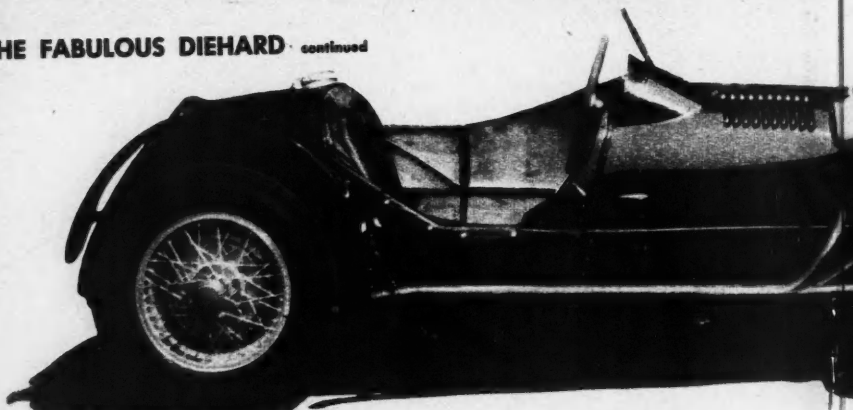


• Brakes are large diameter Lockheed from TD Mk II with Alfin drums and safety hubs.

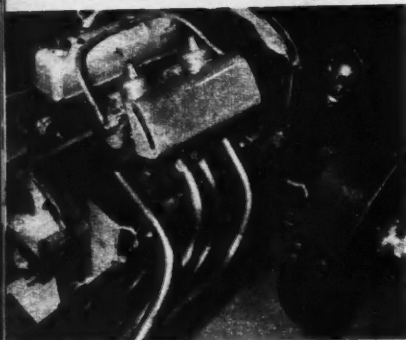
• Steering on Miles' car is by MGTD rack and pinion, giving easy, positive and light control.



THE FABULOUS DIEHARD continued

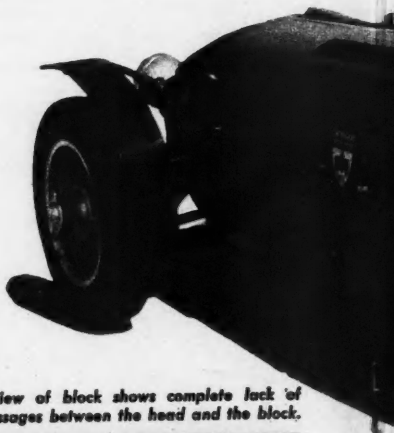


• Side view of car shows simplified body construction, total cost of which was just under \$60.

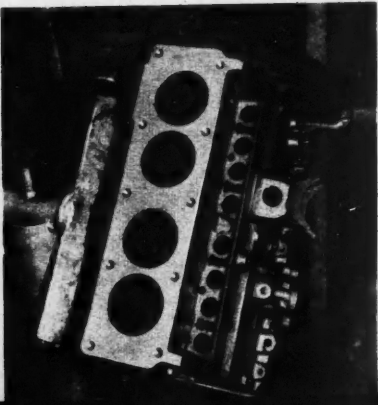


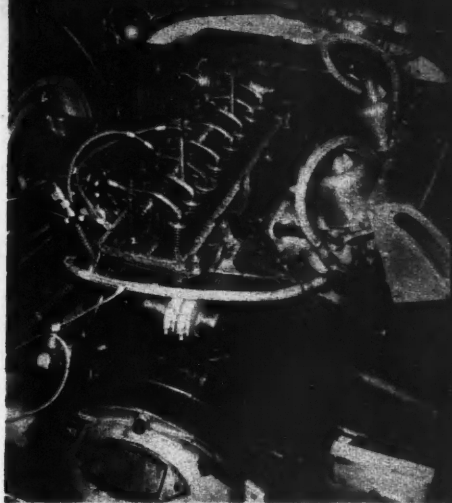
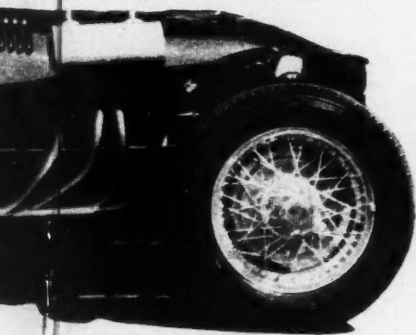
• Large twin S.U. carburetors connected by a balance box are set on fat Mk II log manifold.

• Spare tire required by FIA regulations is used to plug the open rear end of turtle deck.

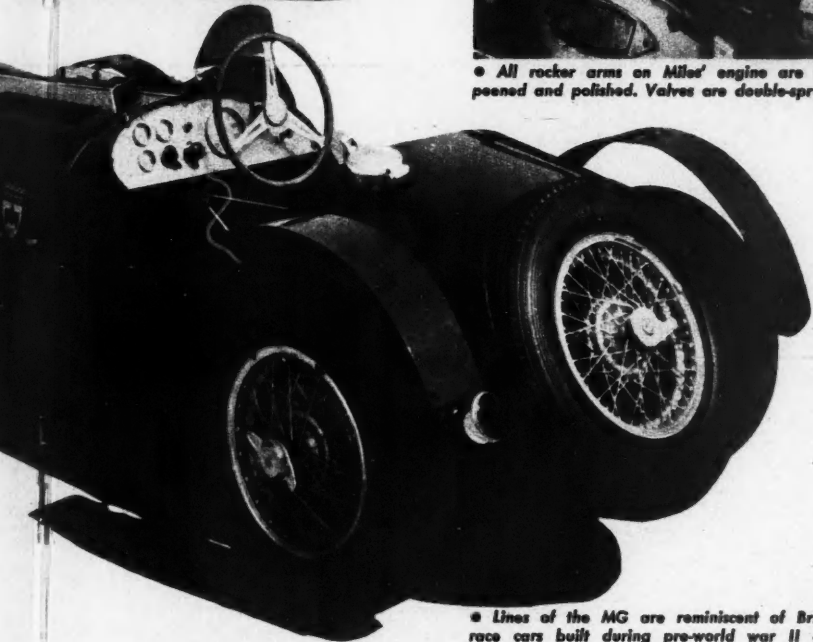


• Top view of block shows complete lack of water passages between the head and the block.





• All rocker arms on Miles' engine are shot peened and polished. Valves are double-sprung.



(Continued from Page 33)

A foremost exponent of the starched upper lip was Ken Miles, English-born service manager for Los Angeles' Gough Industries, western distributors for the MG. The stiffening did not apply to Ken's brains and ability, however. Before he came over here, Ken

• Lines of the MG are reminiscent of British race cars built during pre-world war II era.

built race cars for a living, so what could be more natural than to do something about the complete and absolute lack of wins shown by his company's stock-in-trade?

Stocking up on midnight oil, Ken kept the lamps burning for nearly six months. Plans

(Continued on Next Page)



• Crewchief Gordon Whitby swings light engine out. Mill and gearbox are mounted as a unit.



• Dash and cockpit are equipped with only those controls necessary for racing the car.

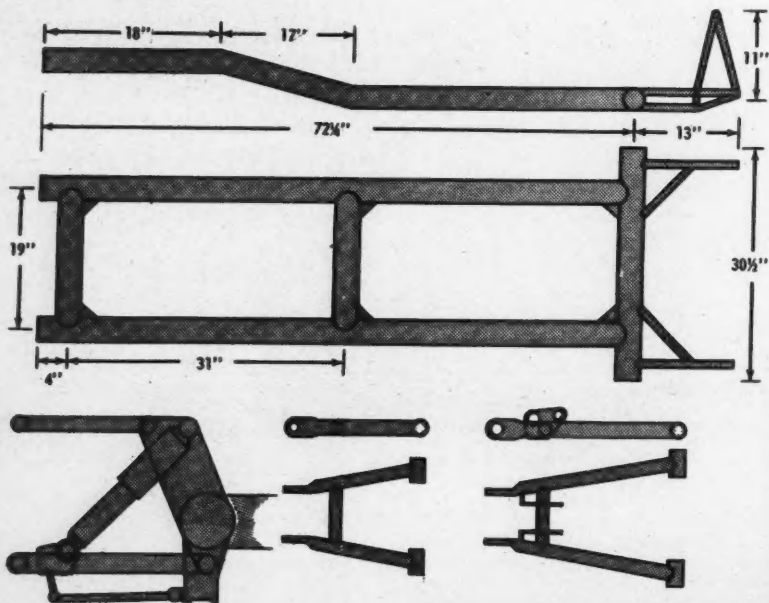
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were drawn and redrawn and then redrawn again. Miles has one point on which he is dead set — wheel adhesion. He feels that every time a wheel breaks loose speed is lost.

Due to the fact that the car would have only a limited amount of horsepower it was important that every ounce of that power be transmitted to the road every bit of the time. At first Ken planned on using a radically de-stroked MG TD block in conjunction with a blower. Then he heard of a new block, a fore-runner of the '54 block. This new mill could be bored out to just under 90 cubic inches as compared with the 75 cubes or 1300 cc's to which the TD block could be punched.

Coupled with this was the fact that the head and block carried separate cooling systems. In any engine which is to be turned at consistently high rpm under conditions of high compression ratios there is a leakage of hot gasses into the water jacket, creating hot spots in the cooling system. The separate systems eliminated this problem.

With the problem of high rpm and com-



• Plans show main frame and front suspension. Rear axle swings behind frame on trailing springs.

pression licked, Ken finally evolved a chassis that would apply the full power of the engine to the road, this being 70 bhp at 6400 rpm after the usual full-house treatment.

The detailed working drawings were transferred with chalk lines to the floor of the shop and the chassis welded together. The main tubes used were $\frac{1}{8}$ wall, $3\frac{1}{2}$ inch mild steel tubing, as were all cross members. The rear chassis members bearing the seat, fuel tank and spare tire as well as the rear body formers were made of $\frac{1}{8}$ wall, one-inch tubing.

The front suspension was entirely hand-made from one-inch tube and boxed $\frac{1}{8}$ -inch flat stock (see plan drawing). Morris Minor torsion bars supply the bounce. The rear suspension is a unique application of trailing quarter-elliptic springs. The axle itself is suspended above the springs by means of long fabricated hangers. Two short radius arms are attached to similar hangers which ride above the axle. A sturdy sway bar holds the whole assembly in line. Reworked Alfin TD Mk II brakes and center-lock Rudge type wheels wearing 5.50 by 15 boots complete

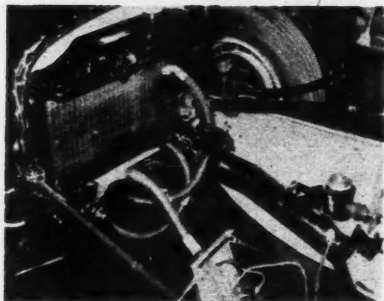
the running gear. Steering is by means of an ordinary TD rack and pinion set-up.

The body was formed in the simplest manner possible. Small tube body formers were attached to the bare chassis. Sheet aluminum was then applied at a given point and attached. The sheet was then merely rolled or bent around the formers and fastened there. The whole affair was carried on somewhat like wrapping a Christmas package in tinfoil. There are no compound curves anywhere in the body except for the nosedpiece, which was farmed out to a panel-beater.

"It's not the most attractive body in the world," says Ken, "but it has one distinct advantage... it cost less than \$60."

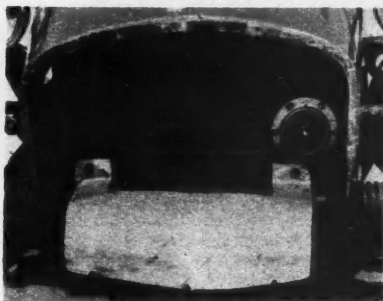
Ken and crew labored throughout the fall and winter, completing the car in the early spring. Neither Miles nor his crew members are given to idle chatter; consequently when the car appeared at the Pebble Beach race it was a completely dark horse. There were even a few pitying whispers of "diehard." What happened then is history.

(Continued on Page 62)



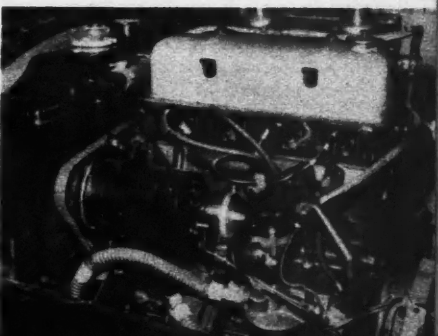
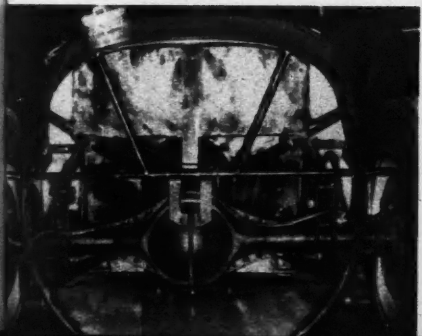
• Heavy, large diameter wire wrapped hoses carry oil to and from the full-flow oil cooler.

• Wide open rear deck gives easy access to the rear suspension, fuel tank and differential.



• Large capacity oil cooler rides underneath a very small Morris Minor radiator in the nose.

• Left side of engine shows how oil cooler lines are connected through the oil filter.



THE BEAR



BUICK POWERED DRAGSTER

Text and Photos by Jack Baldwin

THERE are two outstanding things about Jarvis Earl's Buick-powered rail job, "The Bear," that causes crowds to gather. One is the way it looks and the other is the way it goes. And go it does! The first time out the 25-year-old driver and builder turned 130.6 in 9 seconds flat at Santa Ana running on alcohol.

Given a more gaudy paint job and let it be pulled by a big team of white dray horses and Earl's hot rod might easily pass for a circus calliope. With six carburetors jutting skyward and eight chromium-plated headers poking out of the side it might well be confused with a steam pipe-organ on rails and wheels.

But those who have tangled with "The Bear" on the drag strip have realized they are not dealing with any circus freak. Although there is nothing freakish about "The Bear" there are a couple of things which are rather odd. For instance, the name of the car — "The Bear," or the fact that a pretty

blonde girl is a member of the five "man" pit crew. Perhaps neither of these odd characteristics make it go any faster, but here are a few which do.

Carburetion!

One look at those six jugs perched on the top of the specially built manifold and it is apparent the importance Earl places on carburetion. The carburetors are Stromberg 97's. At least they WERE until the builder started shooting them full of holes. The venturi has been bored out $\frac{1}{32}$ of an inch to increase the volume of fuel mixture available to the engine. The size of the dump tubes was increased to .200 while the needle valve seats were increased to .140.

There are perhaps few draggin'-wagon builders in the United States that place as much importance on engine springs as does Earl. Nearly all of the springs in "The Bear" are custom made. As production manager for Griffin Coil Spring Company in Los Angeles, Earl learned years ago the impor-

tance of having the right spring for the right job. For instance, to boost his oil pressure up to a hundred pounds per square inch Earl built and designed a special spring for his oil pump. The valve springs too have been "hand made" by Earl. As alike as 16 peas in a pod are the valve springs in "The Bear" which exert 140 pounds on the seat and 250 pounds when open. The 12 springs in the otherwise stock clutch have been designed so that they exert 5000 pounds of pressure.

But the springs in Earl's car are only one of many interesting details about it. Let's talk about a few of them.

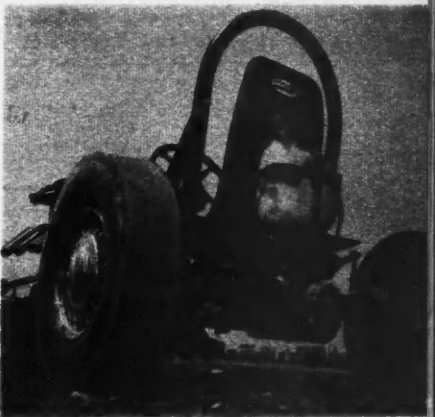
Jarvis picked a straight eight engine block around which to build his hot rod for two reasons: (1) He claims there is more efficiency per pound in a straight eight than any other engine, and (2) because of the efficiency of the overhead valve system as compared to the L-head type used in most V8's. Earl started with a 1936 Century block and by boring it an $\frac{1}{8}$ th of an inch he has brought it up to 340 cubic inches. The stroke is stock. The pistons are Egge and are connected to the crank shaft by '49 Buick stock con rods.

The pistons are fitted with two compression rings and one oil ring. There are no expanders. Both the main and con rod bearings have been set at .006 clearance. He uses Morraine bearings. To increase the efficiency of his oil system Earl installed a stiffer spring on the relief valve in the oil pump. The relief spring is 110% stiffer, Earl calculates, than the stock model. To further increase the

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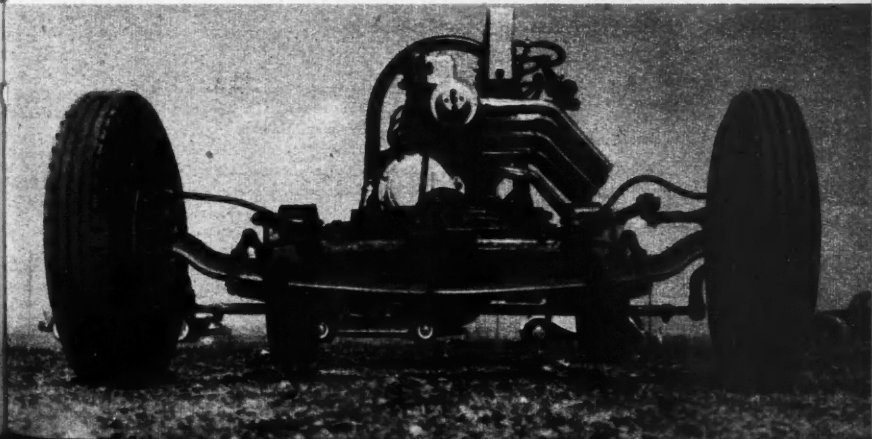


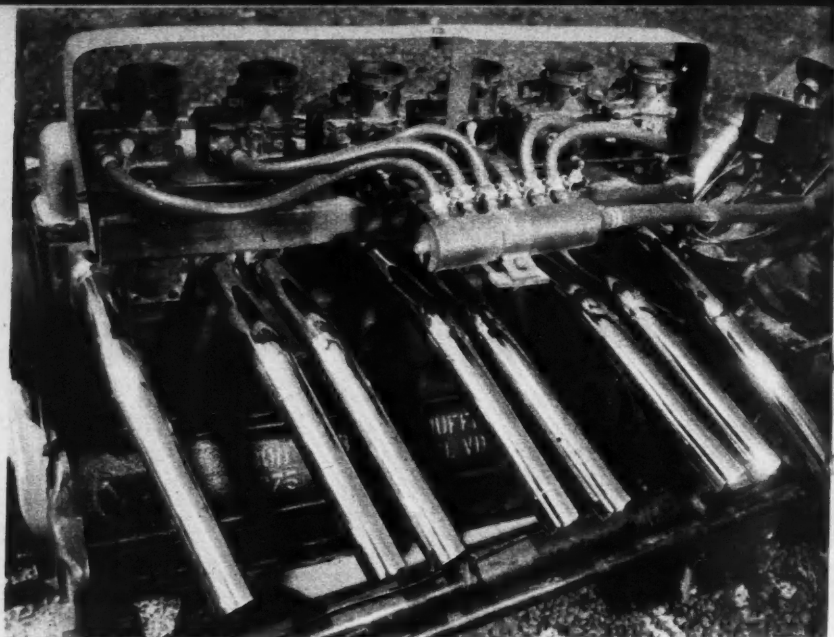
• "Office" of the "Bear" is extremely stark. Running without firewall is not recommended.



• Rear end sports quick-change center section. Fuel tank is 3 1/2-gallon aircraft de-icer tank.

• Already low front end is slated for further dropping through modification of spring and axle layout.





• Six reworked carburetors dump fuel into box manifold. Eight stacks direct exhaust gas out, down.

THE BEAR continued

efficiency of his oiling system he grooved the bearings all the way around.

"The Bear's" builder, because he had not stroked his engine, elected instead to mill the 1942 Century head from which he took off .312. This necessitated the installation of special push-rods which he made from $\frac{3}{8}$ -inch chrome moly tubing. He shortened them $\frac{7}{32}$ of an inch less than the stock models so that they would make contact with the valve end at the proper angle. The valves, both the exhaust and the intake, are from a 1935 series 90 Buick. He enlarged the ports of the valves $\frac{1}{32}$ of an inch over stock. Because of the valve-in-head design Earl felt it unnecessary to change the angle of his valve seats and left them at the customary 45 degree angle.

To get rid of the burned gasses Earl installed eight headers 26 inches in length, canted them slightly astern for a streamlining effect, and had them chromed for looks.

A Spaulding 290 cam does the lifting. The milling of the Century head and the $\frac{1}{8}$ -inch over stock bore gives Earl a 9¼ to 1 compression ratio.

A Scintilla Vertex magneto supplies the spark to Champion J2 plugs.

At present Earl is running with a stock flywheel. Also stock is the 1938 Buick Century transmission that "The Bear's" builder has built into his speedy dragging machine. The brake and clutch pedal arrangement on "The Bear" required little alteration. Both are attached to the transmission housing and required only a little heat from a torch to bend them so that they would fit properly.

Earl uses a completely stock universal joint arrangement. The builder did not forego safety in the construction of his rear-end arrangement. He uses a 1940 Ford differential which is equipped with a Halibrand quick change rear end. He fabricated a special spool so that he could use an axle from a ¾-ton Chevy pickup. Earl elected to use Chevy axles because they are so easy to change in the event one snaps. He claims that these truck axles are strong enough to withstand the severe punishment during high-speed shifting. The axles are equipped with safety hubs. The wheels are equipped with 1940 Ford stock brakes using riveted brake lining.

The front axle is from a 1934 Ford using '40 spindles and drums. The front wheels on

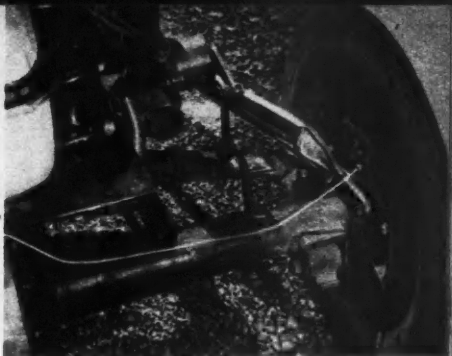
"The Bear" are 15-inch, 1940 Fords. The front tires are 5.50 x 15. On the rear Earl uses 7.00 x 15 asphalt slicks. For good road contact Earl picked Houdaille 50-50 shock absorbers.

Still another interesting detail about Jarvis Earl's hot rod is the fact that it required only three weeks to build. He estimates he has approximately \$2000 net tied up in the car. This means the car is worth just about \$1 a pound, since it weighs out at exactly 2000 pounds.

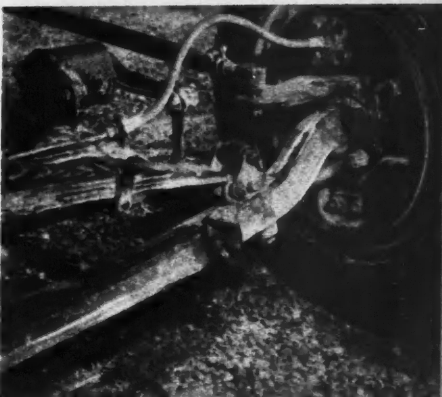
Earl's racing ambitions are to hit 150 miles per hour. More than one skeptic has said, "Can't be done." But Earl believes he can when he has completed a few modifications which he has in mind. He intends to install light weight magnesium pistons, in place of the ones he now uses. He is going to bore out the cylinders and bring the engine up to 370 cubic inches. He is going to lower the front end four inches, and cover "The Bear" with a body.

However, he claims that any increase in speed he is able to attain won't necessarily come from modifications to his car, but will be due to a new fuel recipe which he has concocted and which he claims "is more potent than nitro-methane." He claims his new fuel recipe, which he regards as "top secret," releases more oxygen and gives him far more energy.

"When I get those modifications made," says Earl to his competition, "look out! That 'Bear' will be a wildcat."

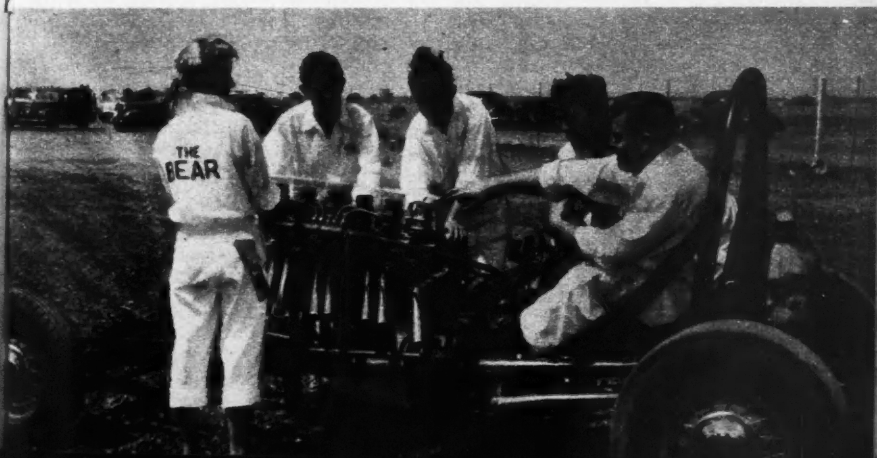


• Rear suspension is standard Ford except for shock mounting, which fits on special bracket.



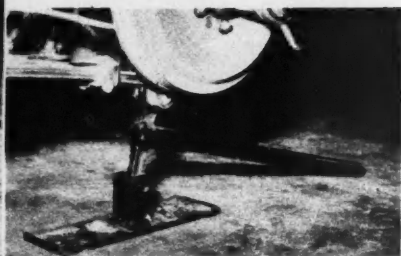
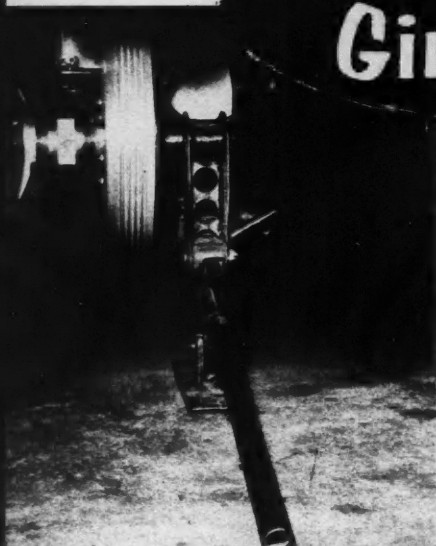
• Homemade steering arm provides for side steering in conjunction with the late model hub.

• Crew members, l. to r.: Sara Oxman, Melvin Pazinelli, Fred Herman, Ted Riessen, owner Jarvis Earl.



Garage Gimmicks

BUILD A RACING JACK



● Operation of the jack is simple. Here jack has been placed under a rear spring perch and handle depressed, moving socket end up and just beyond perpendicular. Jack must bear on wheel support.

Text and Photos by Felix Zelinka

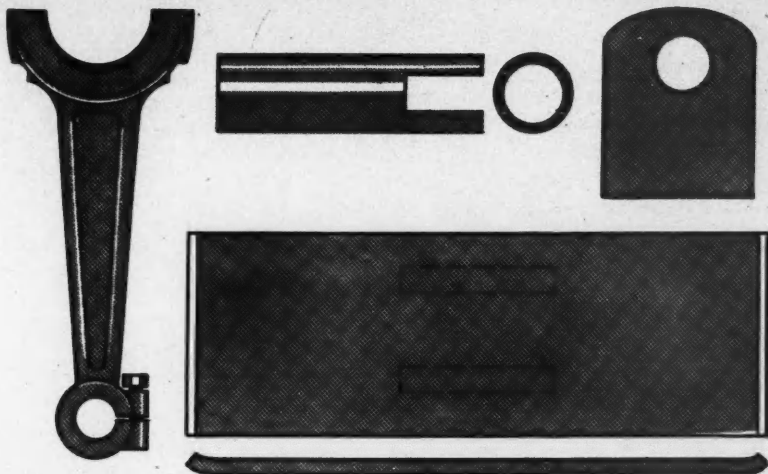
IF you've ever been to a professional auto race and noticed pit crews making complete tire changes in less than one minute you may have wondered just how they do it. This might be especially so after you've just spent several minutes pumping or twisting the handle of a jack stuffed under your own set of wheels.

Here's a little gimmick which, under certain circumstances, can give you some of that pit crew speed. It's a racing jack that will lift and hold a wheel just off the ground with one quick motion.

One word of warning: the racing jack is by no means a universal item fitting all cars. Each car is different, thus the jack must be made with a higher or lower lift according to the suspension on the car with which it is to be used. It will not work on any car with

excessive overhang, since it must operate directly on the axle or wheel support.

The materials used in making the racing jack can be found in just about any large garage or junkyard. The only tools needed to build it are a torch, a round file and a hack saw. Materials: 18 inches of one-inch O.D. pipe, three inches of one-inch I.D. pipe, a connecting rod and wrist pin and a sheet of $\frac{1}{4}$ -inch steel plate approximately 4×12 inches. Two more pieces of $\frac{1}{4}$ -inch plate approximately $2\frac{1}{2}$ inches by 4 inches are also necessary. The 18-inch length of the jack handle is not necessarily exact. The handle must be long enough so that the con rod is not allowed to pivot more than four or five degrees off of top dead center or perpendicular after the handle has been depressed.

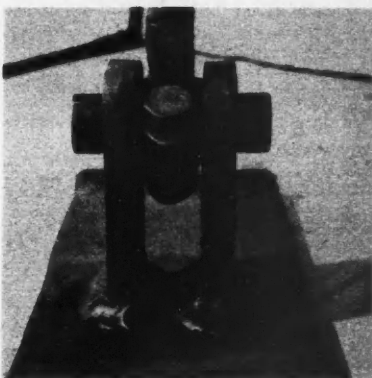


• Here in plan form are all the pieces used in the racing jack. All of the flat stock is $\frac{1}{4}$ -inch steel plate from which both uprights and base plate are made. The length of the jack handle is not critical, being governed by the amount of leverage desired. Only critical measurement is in height of uprights which govern the height of the lift provided by the jack. Blocking under the base will increase the lift.

• Right, once you have all pieces cut to size, weld the two uprights to the bottom plate approximately $\frac{3}{4}$ to one inch apart. Measurement between uprights is governed by the width of the small end of con rod which must fit just snugly enough to pivot with ease. Uprights should be drilled to take pin in a loose fit.

• Below, next, notch the end of the one-inch I.D. pipe approximately one inch back to width of con rod shank. Slip notched pipe onto con rod near big end and weld securely, forming a socket for the jack handle which can be made of one-inch O.D. bar stock or from a length of pipe of similar diameter. This is welded in.

• Below, right, the connecting rod can be from just about any kind of car or truck engine. Weight of car and height of lift are main limiting factors. However, for ease of assembly, con rod should be of the type in which the wrist pin is held snugly by means of a slotted pin journal or boss which is locked with a bolt.



CHANNELING A '39 MERCURY

Text and Photos by Bob Behme

LIKE so many of us, Glen Hooker, 17-year-old Junior at Burbank High in Burbank, California, wanted to modernize and customize his car. The problem which faced him was a selection of the best way to tackle the project. Was it best to section, channel or simply "Z" the frame?

Luckily Glen's uncle is Neil Emory, of Burbank's Valley Custom Shop. Glen could turn to his uncle for both professional advice and help when it was needed.

"Early model cars, such as your '39 Merc," Neil told him, "have a body which sits on top of the frame. The bases of the frame

rails are hidden by the addition of a running board or by body skirts. Later cars still carry the body atop the frame, but the base of the rails are hidden by a body design which is built around the rails...a sort of factory channel job.

"The idea behind customizing is to modernize the early cars while individualizing them. With later cars modernization is not necessary. They're individualized by making the body longer, narrower and perhaps lower. Since either channelling (on early cars) or sectioning (on later models) has practical limits, a lower body is obtained by the addition of a 'Z-ed' frame to the other work."

Glen wanted his Merc to be low. He decided that the limit of channel on his Merc was about 3 inches, since, as Neil had pointed out, the body's base should be protected from high road obstructions by the base of the frame. To furnish additional drop Glen decided to "Z" the frame.

On Glen's Merc, as on most Detroit cars, the outer edge of the body shell extends beyond the frame about three inches. At the base of the body's shell the factory has built a box section which strengthens against torsional movements of the body. It is here that channelling first begins. The running boards are pulled off and the width of the box section is measured. The body will be cut free at a point just inside the box section.





The measurement of the width of the box section is transferred to the top of the floor panel, directly above the box section. Since the box section will drop below the top of floor panel it is necessary to build a new box section to extend floor to edge of the door. Before the body is cut free the inside wall of the new box section is constructed. The width of the wall, constructed from a strip of light gauge metal, is equal to the amount of drop to be made...in this case three inches.

First, the metal strip forming the new wall of the box section is positioned. It is tacked in place along the inner edge of the strip.

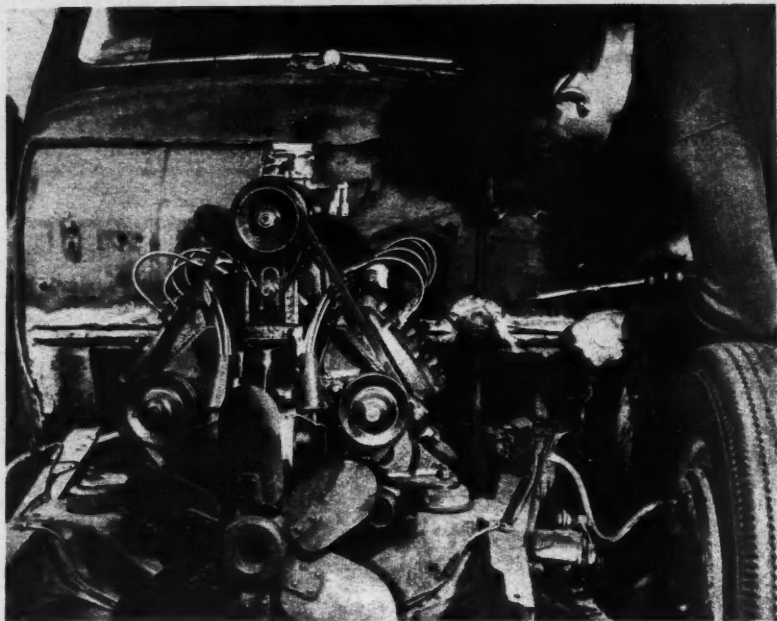


Once the strip is tacked it is welded solidly along the outer edge of the strip. The body is then cut free along this inner edge. The side braces, which support most of the body weight, are also cut free along this same line.



Before the body shell can be dropped the firewall must be cut free. Since the body is to be dropped three inches, a three-inch section is removed from the firewall. The existing gap will be filled in when the body drops bringing the top of the firewall against bottom of the cut. The three-inch section is removed by positioning a three-inch strip of metal across firewall at the spot where the section will be removed, then tracing along the edges of strip. The position where the section can be removed varies on models. On the '39 Merc it happened to be at the base of the firewall at point where the firewall was joined by the floorboards.

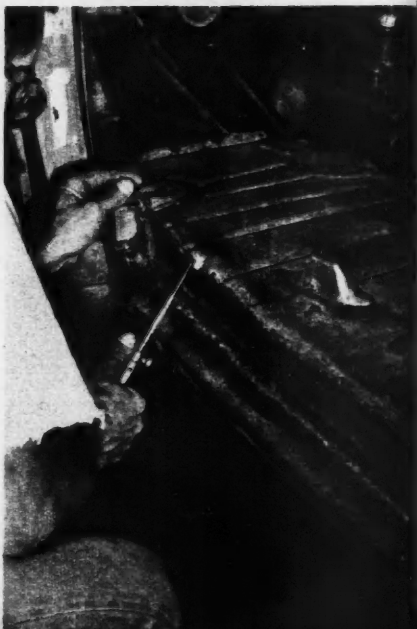
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HERE'S HOW continued

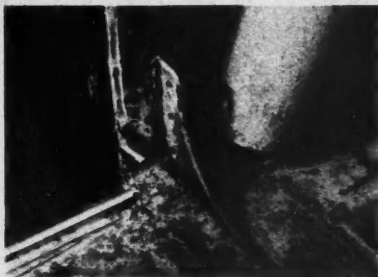
Once the body was freed it was lowered onto pre-arranged blocks which held body at level with the base of frame rails. The body was then realigned and all movable parts such as doors were double checked to be certain they were operable. When this was done the body was tacked in position. The firewall was welded along the seam where the edges of the section were joined. There was no need for reinforcement along the firewall because no support or extreme torsional deflection was carried at this point.

As the body was dropped it passed by the main braces, which had been cut. The top of the inner wall of the new box section was now level with the top of the floor boards. The floor panel was welded to the inner wall section. This area does not support much of the body's weight, but serves as a support link which ties the body together. The outer wall and top of the new box section will be added later.





This is the front body brace, at the front of the door upright, before it was cut. The brace was cut across on a line which matched the inner edge of the box section. In the center, where the brace is raised, it was cut on a vertical plane, to allow the sections to slide easily.



This is the rear door brace. It was cut in same manner as front brace, shown in photo number seven. Care should be given to the vertical cut, which is necessary to correct alignment of brace after the body has been dropped.

The Merc body flares out just above the rear support brace. When body is dropped, the point at which the brace welds to upright door post is further away than in stock position. To re-join the brace it is necessary to weld an extension from the base of the brace to the door upright. This extension should be equal to, or possibly greater than, stock support strength.

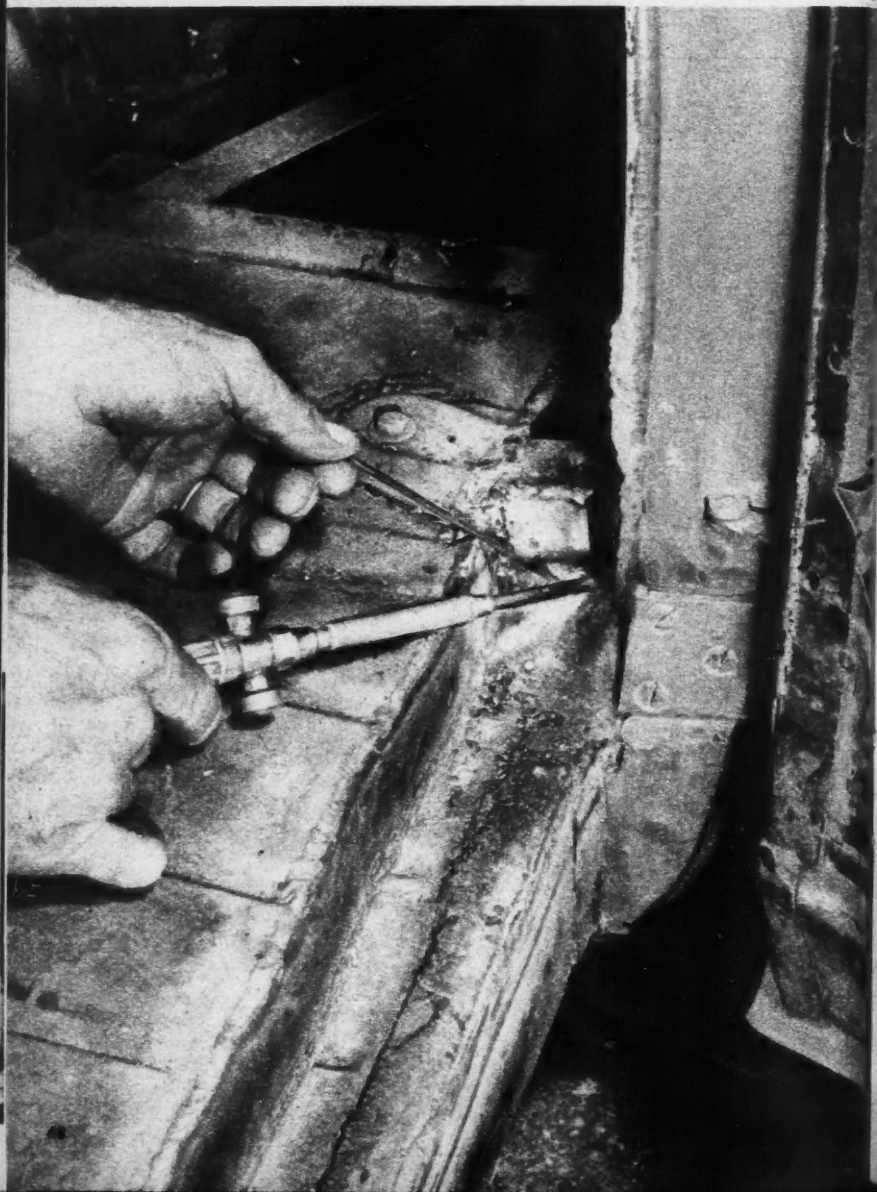
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HERE'S HOW *continued*

Body braces are welded down into the box section for greater strength. All body braces

are welded in the same manner. Before completing welds the doors should be checked to see if the body alignment was destroyed.



Glen planned to drop his car even lower by "Z-ing" the two rear frame members. First step toward this was to remove the rear half of the floor panel to provide access to the rear frame members. Only other alternative: remove entire body. The floor was chiseled free around its perimeter. The project was begun at the raised portion of floor panel, just aft of seat. Earlier cars often do not have a floor panel with a raised section. On these cars, chiseling should begin at the point where the frame kickup begins. Work should include chiseling panel free where it joins the wheel well, along the sides of the body, and across the rear trunk area. All body bolts should be removed.

The frame is "Z-ed" by cutting two V-shaped notches in frame members, removing the material and forcing the edges of the notches together. The first notch is cut at the start of the kickup. The V is cut from the top, down to the base of the frame. It should be made at a lightening hole and bottom of the V should not penetrate the base of frame. V section is $1\frac{1}{2}$ inches wide. When the material is removed the frame is bent up till



the edges of the V meet. These are welded and a heavy gusset is added over the joint.

(Continued on Next Page)





HERE'S HOW continued

When the lower notch has been completed it pulls the frame members up about 5 inches. It is necessary to drop the rear of the frame back into stock position to fit floor, panel, gas tank, etc., in place. At this point the rear cross member is also out of position. The rear cross member is removed. The second V is made at top of kickup, directly above the axle. The V-shaped notch is inverted, but cut in same manner and of

identical size ($1\frac{1}{2}$ inches). The frame is then bent down until edges of the V meet. This is welded solid and gusseted. Next, the cross member is repositioned. Member must be positioned properly. It is lined up with the springs and tacked lightly. Its position should be double checked. To do this: take diagonal measurements from the ends of the cross member to known positions such as forward body bolt holes. The cross member should be squared up with a square.

Since the rear frame members have been kicked up five inches, then dropped back to the stock position in the back, the rear edges of the frames are five inches short. Bumper, gas tank, wiring and fuel lines, which were removed before "Z-ing," will not fit. To reposition these items in stock position it is necessary to extend rear edge of frame members five inches. This is done by cutting the rear frame members at a point about half way between rear end and top of kickup, inserting a 5-inch section of frame, and welding frame back in stock position. The frame inserts should be stuffed inside the frame for added structural strength.

When this has been done the gas tank, fuel lines and wiring can be installed. While there is still a lot of work to be done, the car is well on its way to being customized. Glen Hooker, with the help of his uncle, is completing the work. The final section of this two-part channelling story will follow next month.



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THE BRUTE

**America's Fastest
Motorcycle**

by Dick Day

Photos by Pollard, Reshovsky, Rickman

SEVERAL years ago two young men pooled their assets to build "the fastest thing on two wheels." One owned a 74 cubic inch OVH Harley-Davidson motorcycle and the other operated his own motorcycle shop in southeast Los Angeles. For many months the small shop windows glared from the burning of midnight oil and finally the day came for the bike's initial appearance at a drag strip.

The C. B. Clausen and Bud Hood motorcycle, dubbed "The Brute" since that day, has become one of the world's most legendary pieces of speed equipment. Why? Well, let's look at the record; from a standing start quarter-mile drag it turned 135.90 mph; at the Bonneville National Speed Trials last year it established the nation's unlimited class bike record at 168.77 mph. The most outstanding record to its credit was attained during a quarter-mile drag race, when it was matched with a P-51 Mustang fighter airplane. The "Brute" beat the plane out by a few yards.

Since the beginning the machine has gone through many stages of development, some most unorthodox. As co-owner C. B. Clausen stated, "when we decided to build this machine, it was agreed that it would be a job with all stops pulled. Engineering obstacles were encountered which no one had ever dreamed of; however, they were finally con-

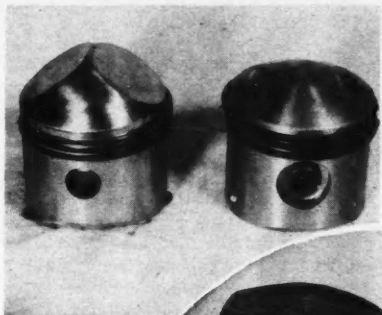
quered after a lot of hard work on what you might call the old trial and error method right up to its present day status."

As example of problems encountered were the cylinders. The stock cast iron barrels wouldn't stand up under the compression pressure heaped inside them, and consistently kept coming unglued. C. B.'s solution to the problem was two seven-inch chunks of steel, from which he machined two barrels with twice the strength of the stock units.

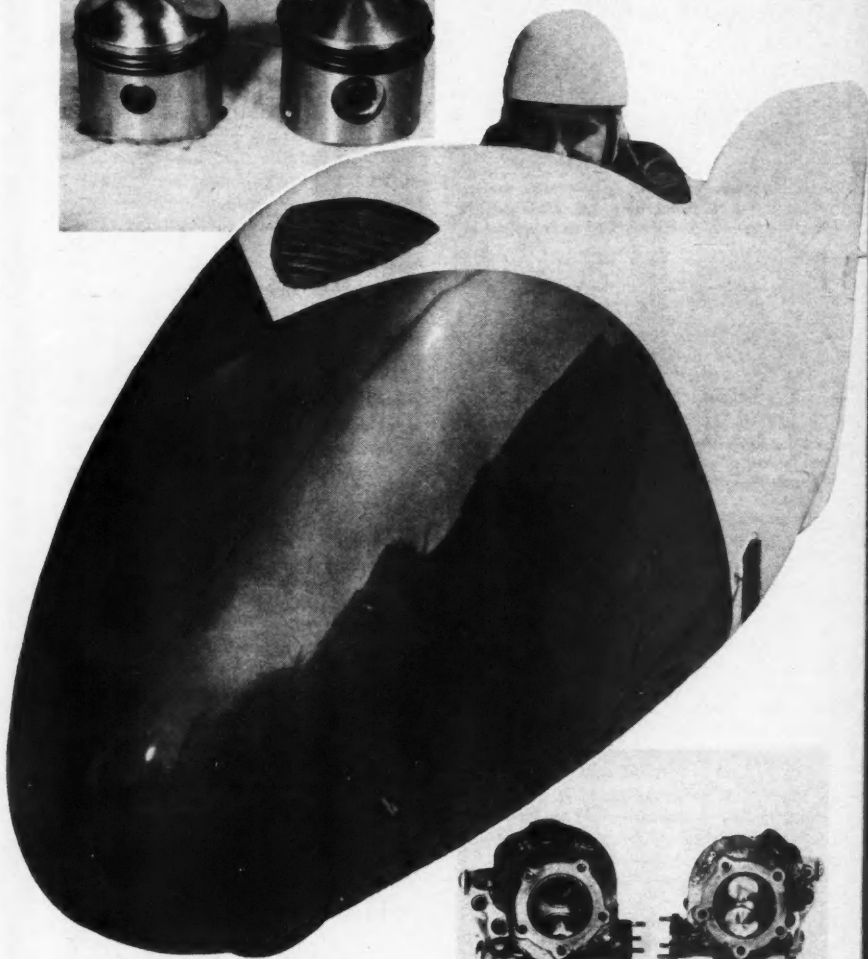
Then came the pistons. Stock slugs were definitely out, so it was decided to manufacture them to specifications. This meant a design that would make full use of power, yet strong enough to withstand the tremendous compression increase of 13 to 1, without collapsing. But collapse they did periodically, and from time to time the design has changed. The present pistons are made of aluminum and are domed. These are just two of the many hurdles that had to be conquered by Clausen and Hood when bringing their machine to the top of the ladder for two-wheeler speed marks.

Early last year the "Brute's" appearance at the drags began tapering off and within a few months its record was surpassed by Lloyd Krant's Harley-Davidson drag bike. Because of this everybody thought the "Brute" would come out of its semi-retire-

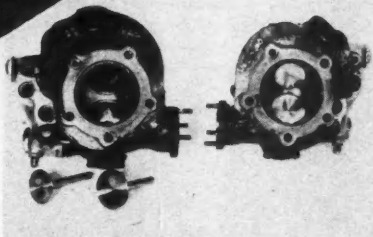
(Continued on page 54)



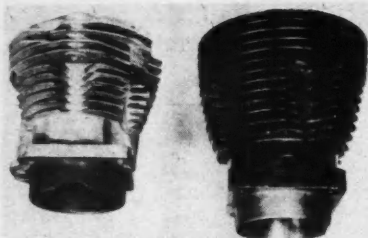
• Brute piston (left) compared to stock slug. Piston carries three soft rings, each a scraper, minimizing the oil leakage.



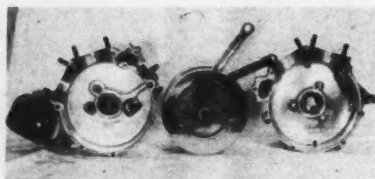
• Bobby Kelton when underway gets inside shell and peers through small windshield. Contrasting blue and white colors insure light beam of electric clocks being broken.



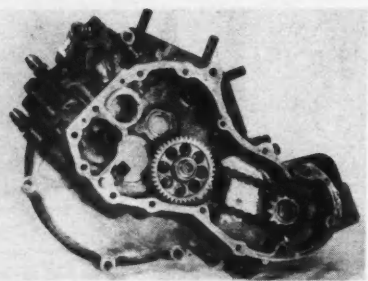
• 1½-inch manifolds were welded to each head for dual carburetion. Note unequal valve size. Exhaust 1½" dia. Intake 2" dia.



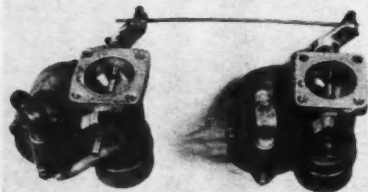
• Hand-made cylinder (right) was turned from a 7-inch block of steel. Note length and heavier base compared to the stocker.



• Flywheels and cases display high polish on inside of cases as well as on flywheels themselves. Wico TT magneto is installed.



• Right side of cases showing adaptation needed for installation of chain driven mag. Magneto's ratio is 2:1 to motor.



• Carburetors for the Brute are twin 1½-inch Rileys which were made to order. They are activated by rod as one unit.

THE BRUTE *continued*

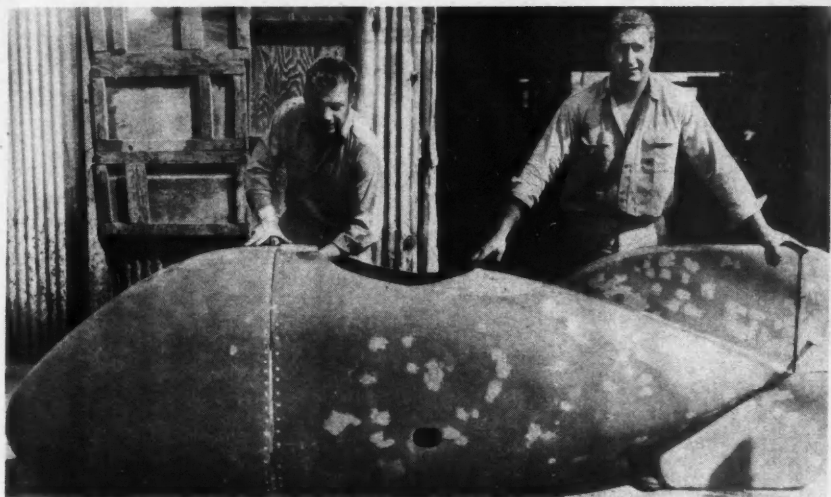
ment and take a stab at regaining its quarter-mile speed record, but back at C. B.'s shop the "Brute" was in the midst of some very extensive rejuvenation.

Attached to the bike's frame was a chromemoly frame superstructure resembling a streamliner, and in the corner the answer . . . a complete fiberglass shell covering. This meant only one thing, at Bonneville Clausen and Hood were going after the World's international speed record of 180 mph, held by Germany's NSU motorcycle.

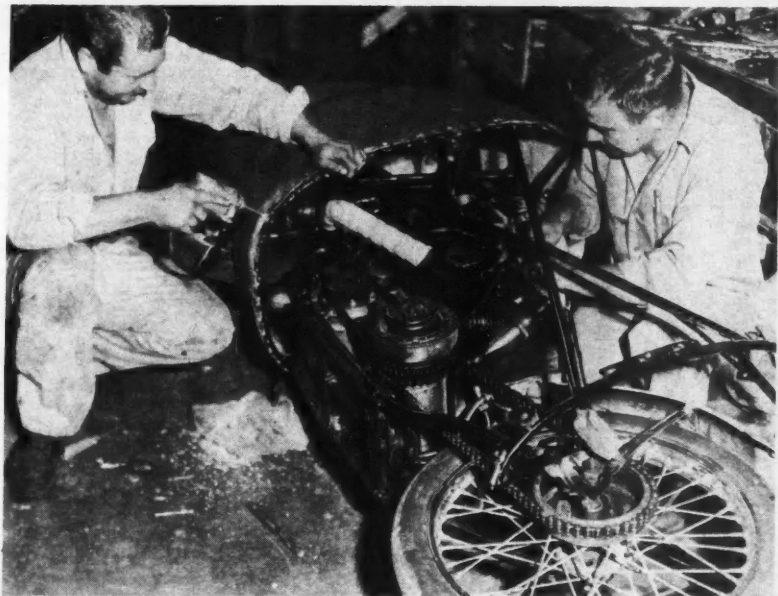
On opening day of the Bonneville Speed Trials the blue and white streamliner, with Bobby Kelton crouched low inside the shell, was pushed off for its attempt at the world's record. The streamlined "Brute" accelerated down the smooth two-mile approach swiftly and entered the first timing trap still accelerating. The reported speed at the first trap . . . 170.13 mph, and still gaining speed at an alarming rate. As it entered the first mile trap it happened . . . the two-tone bullet-shaped object began careening wildly, the back wheel began skipping from side to side. Crosswinds had lifted the tail section and caused the machine to go into a speed wobble. Through some unknown fate and Kelton's masterful riding the bike was kept perpendicular and slowly brought to a halt.

Several remedies were tried to get the machine to control while underway, but to no avail. The streamlined cover was removed. Later in the week while working out with a newsreel camera car, the speeds proved too slow for the engine and it collapsed a piston. This ended their speed attempts.

Clausen's comments on this year's record attempt were, "We've found out that it's impossible to run a two-wheeled streamliner with crosswinds and crosswinds do exist at Bonneville. Next year we'll have a machine with a longer, lower frame and a lower shell. We've set two goals, one the NSU record, and the other 200 mph. Once we solve our streamlining height problem we'll be able to drop everything from a 45 cubic inch flat head engine up to the Brute's powerplant in the frame and really storm." When asked about regaining the drag strip record he said, "Well, now that we have some spare time, we'll be out."



• Fiberglass shell was designed by Clausen (left). Warren Rispolje, his mechanic, assisted him in the construction. Shell including the inner frame weighs approximately 100 lbs.



• Inner frame was made from $\frac{1}{2}$ -in. chrome-moly tubing and is bolted securely to bike's frame. Note exhaust pipes are asbestos wrapped and routed out to each side of shell.

FOR COMPETITION ONLY:

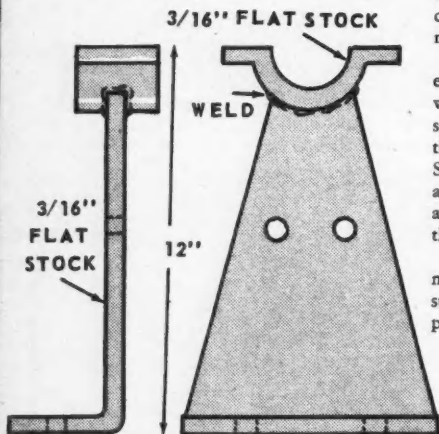
HOMEMADE CENTER STEERING

by John Christy
Illustrated by George Wallace

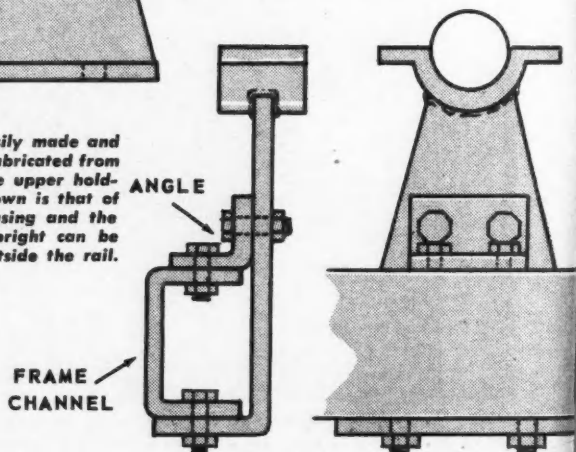
PERHAPS one of the first difficulties one can run up against in building a car for competition is the problem of locating the steering sector. This problem can become especially acute if the frame has been narrowed and/or shortened.

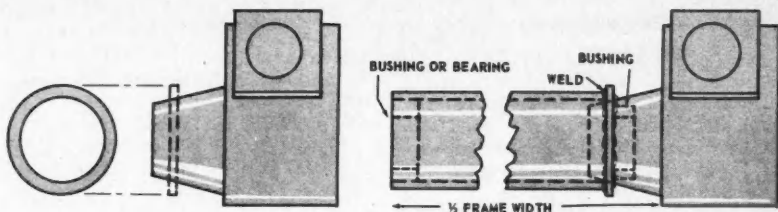
In almost every variety of competition equipment except that of the sports car, in which space must be left for a passenger's seat, the difficulty is most easily solved by the use of a center-mounted steering sector. Such a steering is available for race cars at a price. The tariff in the case of an Indianapolis car or sprint car is rather hefty but the item is well worth the price-per-copy.

However, in the case of a drag or lakes machine or a hill-climb job a very acceptable substitute can be made from a stock unit, particularly if a long pitman arm is used.



• Mounting brackets are easily made and simply mounted. Upright is fabricated from 3/16-inch flat stock as is the upper hold-down. Radius of the hold-down is that of O.D. of the sector-shaft housing and the right-hand support tube. Upright can be mounted either inside or outside the rail.



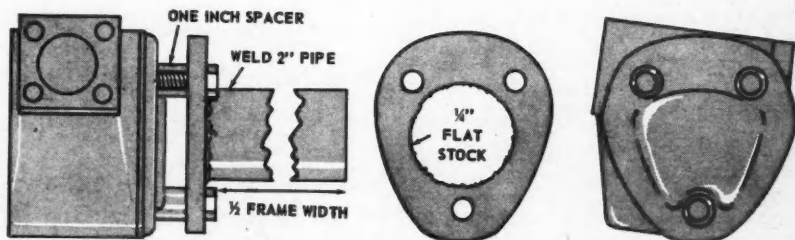
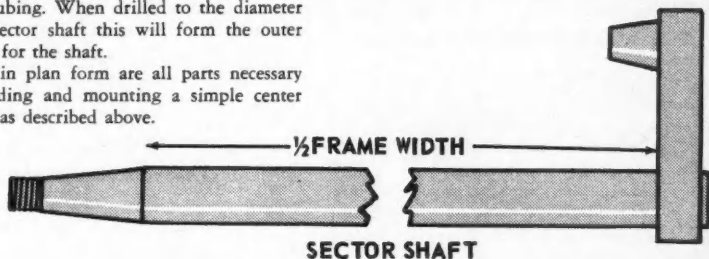


• Sector-shaft housing is made of length of shelby tube or pipe of slightly larger diameter than the original housing. For stiffness weld shoulder to old housing then weld tubing to the shoulder. The tubing should be one-half of the width of frame at point of mounting. Bronze bushing is press fitted into end of pipe at outer end.

The only part that must be machined is a long sector shaft. Materials needed are a stock steering sector box, several sheets of $\frac{1}{4}$ or $\frac{3}{16}$ flat stock, two pieces of pipe or shelby tubing of an inside diameter $\frac{1}{4}$ inch larger than the O.D. measurement of the stock sector-shaft bushing and a piece of round bronze stock of an outside diameter which will allow a stiff press-fit into the I.D. of the tubing. When drilled to the diameter of the sector shaft this will form the outer bushing for the shaft.

Here in plan form are all parts necessary for building and mounting a simple center steering as described above.

• Only part that must be machined is the new sector-shaft. Drill old shaft out of sector cam. Machine new shaft to the same diameter from 1040 or a similar steel stock and then reweld to cam lever. Shaft should be one-half of frame width in length plus the full width of sector box.



• Right side support for the sector is made in a similar manner to the sector-shaft housing. Make a plate the same shape as the cover plate on the gear box and drill holes in the same position as those in the cover. Flame-cut hole in plate to O.D. of tubing. Using half-inch spacers, bolt plate to the cover, replacing original bolts with one-inch capscrews. Then weld length of tubing into the center-cut hole.

LETTERS

(Continued from page 7)

would be of installing a V8-60 in a Henry J. If you could get the engine in would it hold together on fast turns if I would beef up the suspension? Will you please give me an answer either through your swell little magazine HONK, or by letter?

Yours for more speed,
Dennis Brennan
Grosse Point, Mich.

The little Sixty is one of the world's most reliable engines. You can load the thing to the hat, wind it up to 6000 rpm or better, knock it around with the greatest of abandon and, if reasonable first and second echelon maintenance is observed, the engine won't come unsoldered. As to stuffing it in a Henry J, that's relatively simple. There's enough room in the engine compartment of Kaiser's little beast to stuff in an Olds 88, so the problem of mounting the tiny Sixty presents few difficulties other than those of adapting mounts and transmission.—Ed.

PILGRIM

Dear Sir:

I was very pleased to see the '32 Plymouth roadster in the June '53, issue of HONK.

I have a sentimental feeling about the '32 Plymouth roadster, as I owned one myself.

It had 15" '33 Chrysler rims (that may help somebody), and 670 x 15" tires with stainless steel wheel discs. Body and fenders were in perfect shape. The head was milled 100 thousandths of an inch; with a straight through exhaust it made a fair roar.—I sold the Plymouth however, and I now have three cars:

1) a '32 Ford roadster, channelled 9 inches. 2) a V8 touring car, '32 frame, 31-A touring body, 59-A block, '41 Ford station wagon brakes with GMC truck master cylinder. It goes!!! 3) a '51 Austin A-40 Sports Convertible. I wanted to install a V8-60, but my wife said no!

Thanks for a swell magazine, and keep the '32 Plymouths coming.

Don't get me wrong, I'm a Ford fiend at heart.

Sincerely,
Dave Kernaghan
Toronto, Canada

WRONG COUNT

Dear Sir:

I hate to be finding fault with your "crazy" magazine, but I spotted an error in your magazine and thought I'd let you know about it. You will probably get hundreds of letters on this mistake, so mine will be one of the many. BUT, on page 43 of the October issue of HONK, I see where you say: "then eight '52 DeSoto grille bars were added to the opening, giving the Chevy's face an extremely distinctive grille styling."—I can only see seven in the picture. Do I need my eyes examined, or is that an error? Wot happened?

Enough of this defamatory talk about your magazine and a little more praise. Over here in Japan we don't get to see many Auto Magazines, but we do get HONK. And I think, along with my compatriots, that it is one of the finest magazines out for the average hot rod fan. I go in more for the custom parts, but every man to his own opinion. I am accumulating many good ideas to use on my car when I get out of the navy.

Many thanks for a good magazine, keep up the good work!

Sincerely,
John P. Flambard, QM3
Japan

(Continued on page 64)



Bill Danck

... AND THE CYCLES

continued from page 15



and Fred Smith on a Vincent HRD (61-cu. ins.) had moved to the heels of Good's wedgies. Back in the pack, Harper was battling it out with Swede Belin riding a 40-cu. in. Triumph for the lead in their class.

At the fifteen mile mark Fisher had passed Good and was holding a small lead. This was the highlight of the unlimited division. As the closing lap was being completed it happened . . . Fisher heeled over for the last sharp corner followed closely by Good. Fisher's speed proved too fast for the curve, for he and the HRD slid to the pavement and out of the race. Good passed the finish line far out ahead of the following Belin who had overtaken Harper and the rest of the field.

The riders received a large amount of applause for their hair raising speeds and thrilling show. Their lap times had bettered the previous car race times by two and a half seconds so figure it out . . . Like we said at the beginning, motorcycle road racing is here to stay!

MOTORCYCLE RESULTS

SATURDAY 25-MILE RACE

30.50 CUBIC INCH CLASS (OHV)

Place	Rider	Make Machine
1	Marty Dickerson	Vincent "Comet" 30.50-in.
2	Bud Parriott	Triumph 30.50-in.
3	Red Ludford	AJS "7R Boy Racer" 30.50-in.

21 CUBIC INCH CLASS

1	Russ Sierck	BSA 21-in.
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SUNDAY 25-MILE RACE (OHV)

UNLIMITED CLASS

1	Russ Good	Har-Dav. KH 55-in.
2	Marty Dickerson	Vincent HRD 61-in.

40 CUBIC INCH CLASS (OHV)

1	Swede Belin	Triumph 40-in.
2	Walt Harper	BSA 40-in.
3	Gill Roberts	Triumph 40-in.

45 CUBIC INCH (SIDE VALVE)

1	Andy Aceveda	Har-Dav. K 45-in.
2	Ray Nichols	Har-Dav. K 45-in.

JANUARY 1954



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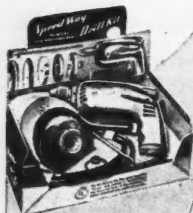


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DRAGGIN' GETS TO BE A CUSTOM

(Continued from page 23)

All in all, figuring the weight element that these two were carrying for the speeds they obtained, their show was great and the speeds phenomenal. Overmeyer's weight was approximately 3200 lbs., Cerny's 3850.

Cerny loaded up his pit crew and the third place trophy for his class and headed home that Saturday night. By the time we arrived home the following Monday we learned that this die-hard enthusiast had arrived home in time to make the weekly Santa Ana drag meet and geared as he was for Bonneville, turned a 99:30 mph. His rings gave out and after the initial run, times became slower. By the time you read this he will have reached his goal of 100 mph, and for a 4000 pound car, that's hauling!



• At Bonneville, Olds, stripped of bumpers, grille, seats. Tape used to seal body seams, windshield, for wind resistance and safety.

Returning to our lead-in question of "what determines a hot rod?" Here's one without the levis and T-shirt, and he's been out of the high school class for some time. Maybe the answer to the question is more thoroughly explained by what George wrote on the back of our technical data sheet when he was first approached for the story, "I have had rods and customs for the past twenty years, can't get away from them. It just grows on you, I guess."

Listed below are the general specifications of Cerny's potent Cadillac engine.

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5. Weiland dual quad throat manifold.
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7. Compression ratio: 10 to 1.
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11. '37 LaSalle floor shift transmission.

"Ye Ole' Salt"

HONKER

by Dick Day



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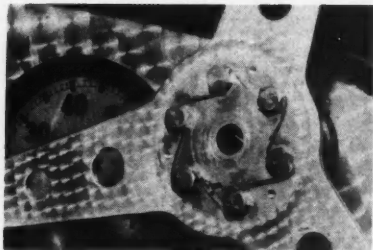
5130 Long Beach Blvd., Long Beach, Calif.

THE FABULOUS DIEHARD

(Continued from page 37)

On a wet course, Ken blew off a large assortment of 91-inch cars including a couple of Oscas and a whole herd of Porsches, all of which had considerably more potent machinery underneath.

Since that time the little green car has been beaten only once by a 91-inch car. Ken has also entered in several main events for unlimited displacement cars and in almost every one has placed second to Bill Stroppe's first place Kurtis, ahead of everything from Jags, Cad Allards and specials to Ferraris. This is spotting somebody a large number of cubic inches indeed.



• Every part on car that is removable is safety wired including the steering wheel.

Ken is not one to brag, but the fact of the matter is that he designed the chassis to take more than double the horsepower it now handles. The chassis is adaptable to almost any small engine from the V8 Sixty to the new Ford four cylinder industrial mill and the Willys four.

For that matter the chassis need not necessarily be built for road racing only. The ability to apply maximum horsepower and full stability to the road surface is essential in any type of car be it road machine or streamliner. The chassis itself is adaptable to just about any body style except perhaps that of the dragster.

Be that as it may, Ken Miles has stuffed together a chassis using only a welding torch, power hand drill and grinder together with the usual hand tools found in the average hot rod's tool kit. The chassis is the best we've seen for this type of car and there you have it. GO!

SHOPPING AROUND

(Continued from page 9)

Parts Cabinets. These cabinets consist of 18 drawers, sell for \$29.94. Precision Equipment Co., 3714 Milwaukee Ave., Chicago 41, Ill.

ACCELEROMETER

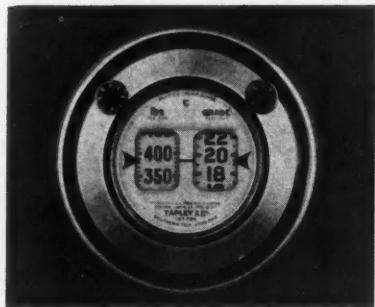
Working on the pendulum principle, this indicator is affected by acceleration or deceleration and is claimed to be useful in

measuring brake horsepower, road gradients, friction, acceleration, etc. It is said to indicate a multitude of auto ailments from rubbing brake shoes to weak valve springs. The instrument is $3\frac{1}{2}$ inches in diameter and is available for flush mounting to the dashboard (\$57 model), or comes complete with chrome mounting bracket for fitting on different vehicles (\$87.50, with leather case). Prices are Net, FOB N.Y. Tapley Products, 53 Park Pl., New York 7, N.Y.

TOOL KIT

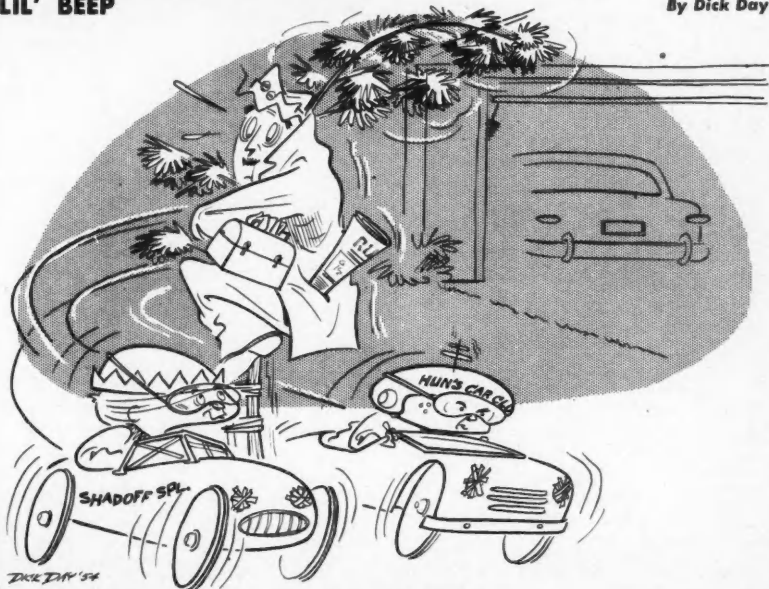
Featuring a complete brace and drill set, a new 10-piece interchangeable kit contains the following variety of tools: three screwdriver blades for machine, cabinet and fine work; a nail and tack puller; cross-point blade to fit recessed screws; three drill bits; a steel brace with a four-jaw chuck; and shatterproof, plastic handle. The screwdriver blades are magnetized. Price of the handyman's kit is \$3.98 postpaid. Write: Terry Products, Box 581, Merrick, New York.

(Continued on page 66)



LIL' BEEP

By Dick Day



"Spectatin' again, Pop?"

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LETTERS

(Continued from page 58)

SPECIAL FROM PARADISE

Dear Sir:

The past few days we of the San Diego Timing Association have received many enthusiastic compliments on your magazine's swell coverage on our recent NHRA sponsored Championship Meet.

This short note to you is an expression of SDTA's thanks for all the fine cooperation we received from the members of the Trend organization during the running of the Champ drag meet here.

We hope to keep your magazine informed of our local activities and outstanding events because we find more and more modern car enthusiasts depend on CAR CRAFT for the straight scoop, that we're sure of.

Hats off to a swell magazine.

Sincerely yours,
Bozzy Willis,
SDTA Publicity,
San Diego, Calif.

T-BARS AGAIN

Dear Hunk:

You've muffed the torsion bar article from the start. In the first place the diameter and length of bars were overlooked, and the shackle connections necessary with longitudinal torsion bars were overlooked completely, except in the photo where they were identified by arrow as "torsion bars." Most recently the reader was misinformed with a set of formulas. These formulas, which originally appeared in a rival mag several months ago, are for SPRUNG weight and a SOFT ride. In your parent "mag" several years ago Bond had an article on torsion bars, and so did Frank Kurtis in Automotive Industries.

You better go back to bolt-on equipment articles.

Joe Wormwood
Syracuse, N. Y.

Perhaps if you had read the most recent bit on torsion bars, pal, you would have seen that the length and diameter of the bars were given. The formulae were taken from the Hot Rod Magazine article by John Bond and were definitely not filched from elsewhere. Our attorney wouldn't permit it. Ray Hansen used these formulae, for which he gives

CAR CRAFT

HRM credit, to build his competition bars. As far as the bolt-on stuff goes, check in with us next month, Joe.—Ed.

BLOOD RELATIVES

Dear Sir:

Hooray for the sports cars! Don't get me wrong, I'm a hot rod fan, but I don't go for this deal of keeping the two in separate classifications. Since they glued together some miscellaneous Morris parts to come up with the first MG, it seems to me that they're a lot closer related than some people think. Keep up the great stories like the ones on the Kurtis and the Cunningham, and speaking of hot rods and MG's, how about some dope on the "mostly MG" machine that Ken Miles is mopping up with out there in Sunny Cal.???

Thanks. Your magazine is the most.

Sincerely,
Jack Baker
Chicago, Ill.

See page 32.—Ed.

THE CONTINENTAL

Dear Sir:

I have a '48 Lincoln Continental converti-

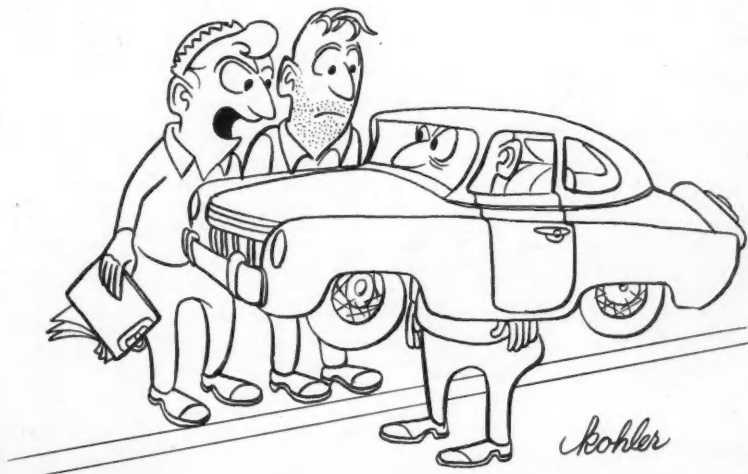
ble and wish to improve its performance to current standards. I am aware of the use of Cadillac, Chrysler and Lincoln V8's in the Continental but I have wondered about putting the body on one of the other chassis.

I presume many problems will be encountered in such a conversion—position of engine, instruments, position of transmission and pedals, steering wheel post length, suspension system, etc.

If you can give me any information about the practicality, etc. of such a change I will greatly appreciate it.

Sincerely,
Leroy Crune
Major USAF

The very idea! The chassis under the Continental is about as good a piece of equipment as you can get in a car that heavy, particularly if you like to keep the car on the road. Aside from this, the Continental body was glued to the frame to stay. The cost of trying to drop this body onto another frame would be more than that of the Connie when it was new. Adapters are relatively cheap and the use of another engine in the original chassis is much to be recommended.
—Ed.



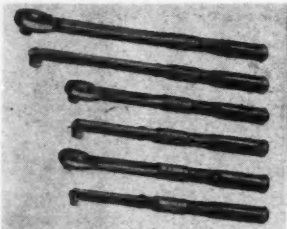
"If you remember, Mr. Jackson, we followed your blueprints exactly."

SHOPPING AROUND

(Continued from page 63)

TORQUE WRENCHES

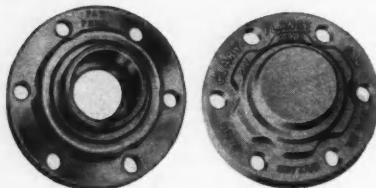
Addition of six PROTO torque-limiting wrenches that are calibrated in inch pounds has been announced by the Plomb Tool Company, Los Angeles, Calif. Capacities of the new torque wrenches are 100-750 and 700-1600 inch pounds. Three models have



a plain head and three have a built-in reversible ratchet head. Drive sizes are $\frac{3}{8}$ " and $\frac{1}{2}$ ". Wrenches release at the proper setting and reset themselves automatically. They have no dials, pointers, scales or other projecting accessories to watch or break.

FREE WHEELING

The new Clary "51" Flange, recently developed by Cam Tool Company, Oakland, California, enables owners of late model Jeeps to convert to 2-wheel drive. The Universal Clary Flange must still be specified for older models with axle shaft nut on the



end of the axle. But the Clary "51" has an integral closed cap and is designed especially for recent Jeep models without axle shaft nut on end of axle. Any military or civilian

Jeep speedily converts to 2-wheel drive with one of the two model Clary Flanges now available. Replacing the standard flange, front differential and toggle joints are rendered inoperative; result is, smoother operation, faster speeds, lowered gasoline consumption, less whine and less wear on both front differential and toggle joints. Substitution can be effected with a wrench and screw driver. For name of dealer nearest you, write Cam Tool Company, 11 Randwick Ave., Oakland 11, Calif.

STATEMENT OF OWNERSHIP

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, Section 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF CAR CRAFT MAGAZINE, published monthly at Los Angeles, California for October 1st, 1953.

1. The names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher: Robert E. Petersen, 8340 De Longpre Ave., Los Angeles 46, Calif.

Editor: John P. Christy, 3006 Vista Crest Drive, Los Angeles 28, Calif.

Business manager: Theodore A. Johnson, 12640 Montana Ave., Los Angeles 49, Calif.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.)

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3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)

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4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

THEODORE A. JOHNSON

Business Manager

Sworn to and subscribed before me this 1st day of October, 1953.

PHYLLIS M. AYEDON

(SEAL) (My commission expires August 20, 1954.)

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(see page 6)

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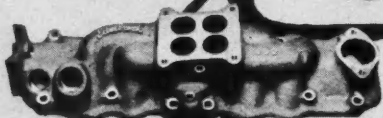
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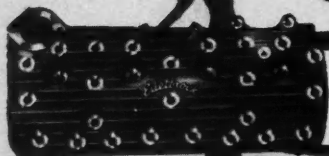
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